PROCEEDINGS
OF THE SECOND INTERDISCIPLINARY SYMPOSIUM
ON GENDER DYSPHORIA SYNDROME

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Foreword

Now that transsexualism is an open subject, and doctors and other professionals have come to know or have contact with transsexuals, understanding has grown. Furthermore, now that we have all seen the hopeless, depressed person with the "unsolvable" gender identity problem bloom forth happily and fit into the more normal matrix of society, professionals are encouraged to lend the helping hand which will relieve society of a dependent, alienated segment. The transsexual, thus, not only may fulfill himself, but also contribute to society. How we may best aid in this transformation is considered in what follows.

Erickson

ACKNOWLEDGMENT

The publication of these proceedings is the result of the efforts of many individuals. Special acknowledgment is offered to Ira Dushoff, M.D. and Zelda Suplee for their help and support in organizing the symposium. Of course particular appreciation is extended to all the participants without whose expertise and involvement the symposium would not have been possible.

We are also thankful for the assistance of Gary Cavalli in preparing this manuscript for publication.

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Introduction

Milton Edgerton, M.D.

Recognition of transsexualism as a serious and a not uncommon gender disorder of human beings certainly has occurred. There is still dispute about whether this clinical entity should be classified as a more severe variant of transvestism, as a special type of homosexuality, as a form of psychosis involving sexual identity, or as a condition quite separate from all of these. Regardless of the final decision that may be reached about classification, many concerned physicians like yourselves have learned to recognize the transsexual. Others have begun to offer meaningful medical help to these tragically conflicted individuals. The current availability of reputable physicians who offer sincere efforts to understand and treat the transsexual patient probably represents the greatest single evidence of progress that medicine has made over the past decade in dealing with human gender disorders.

Real knowledge about the etiology, the clinical variation, the psychodynamics, the treatment and the genetics of transsexualism had little chance to develop until a professional climate was established that was free of emotional reflex and willing to confront the issues. Doctors had to be willing to accept the predictable criticism of many laymen who could understand neither the problem of a transsexual nor the reason why respectable doctors would humor them in their search for surgical alteration of their sexual anatomy. Such criticism is obviously hard both on doctors and their families. It is a small wonder that many wash their hands of these patients for years and refuse to accept them in their practice.

For a moment we should examine why the transsexual patient has had such difficulty in getting an honest hearing from medicine. In the United States many reasons combine to make the physician turn a deaf ear. Our lingering puritanical heritage made sexual alteration seem almost immoral. Removal of

apparently normal genitalia seemed especially questionable. Procedures that involve sterilization were fraught with additional legal complications. Surgeons were not fully protected under malpractice insurance from postoperative litigation by unsatisfied patients. The nature of the surgery made it both expensive and irreversible. Some of the transsexual patients were understandably discordant and exhibitionistic in their contacts with doctors, nurses, and other hospital patients. Others had difficulty with the law or attempted to seek publicity for monetary gain or simply to explain their cruel predicament to an unsympathetic public.

Doctors had little clue as to the cause of the condition. Although psychiatrists had no success in the non-operative treatment of transsexuals, many spoke out or wrote critically of the proposed surgical treatment, warning of dire results that might follow operations based on psychoanalytic theory. Many of these authorities had never personally examined the transsexual patient following surgery, but nevertheless, their effect was felt. In view of these and other restraints on doctors, it seems to me almost miraculous that the initial surgical studies were finally carefully performed on a few dozen patients and that now we have a slowly enlarging body of facts to guide future decisions and treatment. When any new page is turned in medicine, it is of value to inquire as to how it came about.

Several conditions helped the plight of the transsexual patient. The patients themselves, for example, suffered so greatly from social ostracism that they put unusual pressure on doctors for relief. Some even turned to suicide; others went from doctor to doctor, even from country to country. Some, on receiving even simple castration, were articulate and willing to speak out or to write about the relief afforded and the gratitude they felt. Christine Jorgensen, was one of these. A few doctors always retained the ability to listen and to sympathize. One of these was Dr. Harry Benjamin. Although he had, at that time, no way to offer surgery to his transsexual patients, he did what he could do to help with hormone support and other nonoperative techniques. Many patients came to him, and he carefully collected basic data that were to make this condition recognizable to other doctors. He was a true pioneer, and his textbook will remain a classic.

In some countries, legal restrictions were less severe than in the United States. A few early surgical pioneers had the courage to act on their own convictions after carefully listening to the pleas of individual patients. Dr. Fogh Anderson was one of these men in Denmark. The rehabilitation of those first few patients gave some of us in the United States the impetus to study these patients more closely and some additional surgical courage.

In 1963, Howard Jones, Norman Knor, Jon Money, and myself started at the Johns Hopkins Hospital which we believed, at that time, to be the first Gender Identity Clinic in the United States offering surgery. I can tell you that

the atmosphere was still very touchy. Subrosal criticism was rampant within our institution and without. We felt on the defensive, and members of the subsequent gender identity program have felt similar criticism both from laymen and professional colleagues. It is now a matter of history that the first score or so of patients who received operations have responded well, and nearly all have repeatedly affirmed that they would choose the same course today. Some of the surgery was technically inexpert, and the early patient selection was uncritical and relatively unsophisticated. Nevertheless, the follow-up has clearly indicated that the difficult decision to test the effect of surgery on the transsexual was justified.

We now have almost a dozen medical clinics in this country of gender identity teams undertaking preoperative evaluation, surgical conversions, and follow-up studies on transsexual patients. The surgical treatment of these patients by individual surgeons without the help of psychiatrists, endocrinologists and other specialists, in my opinion, is both dangerous and unjustified.

The gathering of members of the gender identity teams at the first international symposium on transsexualism in New Orleans and now on a larger scale at Stanford, is testimony to the need of these teams to share impressions, data, and experiences. Medical societies, courts, juries, insurance companies, and rehabilitation agencies all need the guidance of a group such as this in setting up policies that may meet the needs of all transsexuals. Some countries still have laws, as you well know, against the surgical treatment of transsexualism.

No patient should receive surgical conversion unless he or she is committed to prolonged and careful social, physical, and endocrine follow-up by skillful teams. It must be emphasized that it is not yet established that surgical alteration will become the best method of treating an adult transsexual, but it is established that such treatment may often provide significant relief for many patients. Certainly it offers doctors an unrivaled opportunity to study and understand the dynamics of gender as it relates to human function and self imagery. Perhaps the discipline of psychiatry will glean the greatest benefit from the careful studies of the surgically altered transsexual. Hopefully a method of diagnosing this condition in early childhood may yet avoid the need for later surgery.

All gender identity teams have had to learn much about the complex and differing attitudes of each of its members towards the transsexual and surgery on such patients. For example, the plastic surgeons commonly see in their practice that even minor physical alterations produce profound and lasting improvement in self-image, esteem, and the daily functioning of patients. They find it not surprising that the transsexual patient is made seemingly happy and grateful by physical change. In contrast, many psychiatrists are distinctively

suspicious of producing fundamental alterations in emotional health by operations. They look for signs of ambivalence about surgery and find difficulty in reconciling the diagnosis of transsexualism with traditional psychoanalytic theory. The gynecologists, urologists, geneticists, and endocrinologists seemingly fall in between these extremes in viewpoints. But after a team has worked together for about two years, a growing consensus begins to develop that often includes the sound precepts of each of the disciplines.

In a similar way, it is hoped that this symposium, attended by members of many gender identity teams, will produce a distillation of the combined wisdom of each for the benefit of all. To me it is certainly a historical meeting. We must not forget that the personal and human needs of the individual patients with gender dysphoria constitutes the only real justifiable indications for considering surgical treatment on these patients.

I Gender Dysphoria Syndrome

Gender Dysphoria Syndrome
(The How, What, and Why of a Disease)

Norman Fisk, M.D.

Gender dysphoria syndrome is a descriptive term, encompassing selective clinical situations or a set of psychosocial symptoms and/or behaviors that have been reported by a group of deeply troubled and often desperate patients seeking gender reorientation, including surgical sex conversion. In the Stanford University Gender Reorientation Program, we have not used the term Gender Dysphoria Syndrome as a sole diagnosis, but rather employed it as a prime diagnosis coupled with other subdiagnoses which will be noted and explained later in this presentation.

In an historical perspective I will tell you how gender dysphoria syndrome originated. When we embarked upon the development of a gender reorientation program in 1968, we had no firsthand or personal experience in this area. In fact, our "program" had as its major deficit, or perhaps asset (depending upon which way you choose to look at it), a nearly total lack of experience. The program was conceptualized in a new, bold and perhaps to some, even daring fashion. Given the emotionally charged and highly controversial nature of the disorder that we were attempting to treat, the involved team members felt strongly that patients experiencing subjective gender disorders were indeed legitimate medical patients, and that likely all, or hopefully at least a large segment, would benefit from surgical sex conversion as part of an overall rehabilitative experience. I now admit very candidly that in the early phases we were avowedly seeking candidates who would have the best chances for success so that the overall program could or would be continued. Success also held forth the promise that treatment would be made more readily available to others in a group that obviously was quite rapidly becoming expansive. In other words, shortly after our inception we were

inundated with inquiries about and requests for this particular treatment procedure. Due to inexperience and naivete we went about seeking so-called "ideal candidates," and a great emphasis was placed upon attempting to exclusively treat only classical, or "textbook cases" of transsexualism. Unlike the old medical saw that claims the last time you see a textbook case of anything is when you close the textbook, we began to see patients that appeared to be nearly identical–both from a subjective and historical point of view. Again, having no firsthand experience, our major emphasis was to accurately make a different diagnosis. This, in the then current psychiatric literature, was described as a process of differentiating between effeminate homosexuality, transvestism and borderline states or overt psychoses. We were then attempting to select individuals evidencing some or all of the classical or pathognomonic aspects of "transsexualism." These were usually described as: 1) a lifelong sense or feeling of being a member of the "other sex"; 2) the early and persistent behavioristic phenomenon of cross-dressing, coupled with a strong emphasis upon a total lack of erotic feelings associated with the cross-dressing, and 3) a disdain or repugnance for homosexual behavior. We avidly searched for those patients who, if admitting to homosexual behavior at all, insisted that they always adapted a passive role and avoided the stimulation of their own genitalia by their partner. Of course, there was the anticipated strong denial on the part of almost all patients of any heterosexual experience or interest, often almost to the point of denying ever kissing, embracing, or holding hands with any member of the sex opposite to their own sex of assignment and rearing. As an additional comment, many of the patients initially evaluated strongly insisted that the mere fact that they desired or presented themselves for gender reorientation was in itself proof enough that they were certainly transsexuals and that no other diagnosis could or should be entertained; i.e., this self-same desire differentiated them from effeminate homosexuals or transvestites. Indeed, this view was strongly supported in both the lay and professional literature of the time. Soon it became conspicuously and disturbingly apparent that far too many patients presented a pat, almost rehearsed history, and seemingly were well-versed in precisely what they should or should not say or reveal. Only later did we learn that there did and does exist a very effective grapevine. So effectively "the message had been transmitted and received," that individuals were carefully preparing and rehearsing for what they felt was going to be an intense scrutiny and probing in order to ascertain this supposedly critical differential diagnosis.

Slowly, there appeared instances in which the seemingly very pat histories revealed inconsistencies, downright fabrications and blatant distortions which could only lead to one of two conclusions. Initially, it was felt that some patients were being characteristically manipulative, or worse, sociopathic, and therefore were less than ideal candidates. The second and

correct conclusion emerged after additional experience, when I sensed that the element of conscious fabrication or manipulation seemed quite secondary to the phenomenon of retrospectively "amending" one's subjective history. Here, the patient quite subtly alters, shades, rationalizes, denies, represses, forgets, etc., in a compelling rush to embrace the diagnosis of transsexualism.

At this point we obviously encountered many resulting dilemmas. One such dilemma was that patients initially not accepted for the program were terribly hurt, disappointed and angry. They began revealing the fact that others they knew, who had been accepted, allegedly had lied and distorted, but had not been discovered. A second dilemma faced was that our initial approach to patient selection forced the evaluating psychiatrist into the understandably painful position of being more of an interrogator or sleuth, rather than fostering the more conventional and acceptable role of a helping and caring member of the treatment team.

An alternative at that time could have been to re-shape the entire program into a surgery upon demand situation, where only overtly psychotic or borderline individuals were excluded. Fortunately, we were not so disposed. Except for overtly psychotic patients who statistically constituted between 20 to 25 percent of those making initial contact, no one was unequivocably refused or irrevocably rejected for gender reorientation and sex conversion. This was done very much in keeping with the axiomatic theme of not ever robbing a patient of hope. By then we were very fortunate to have what we euphemistically refer to as "a grooming clinic" or "charm school," which was in existence due mainly to the efforts of Dr. Donald Laub and his staff. As this grooming clinic initially developed, it was to be a supportive group experience in which the male "transsexuals" learned cosmetology, good grooming and how to appear more naturally feminine, particularly in those cases where this was obviously if not urgently required. In fact, it did become a group therapy situation in which individuals met on a once per month basis to exchange information, opinions, experiences, and to mutually share feelings, successes and failures. The grooming clinic initially was staffed exclusively by very dedicated para-medical personnel. Only subsequently have full-time professionals become involved. This extremely unique group provided an ongoing basis for monitoring, observing, and assisting a patient placed "on hold" (or, more accurately, one not told he would never receive surgical treatment but rather informed that everything was "not yet quite in order, and that we required a further period of evaluation before definitive treatment"). Thereby out of this grooming clinic or charm school, we developed extended contacts, re-evaluations were possible, and most importantly, the treatment team gained both time and increasing experience. The grooming clinics were also attended by many post-operative patients. In this way, we had yet again a unique opportunity to conduct ongoing follow-up. Gradually there seemed to

emerge a large group of non-psychotic patients who could not accurately qualify for the diagnostic term "transsexual." These patients were intensely and abidingly uncomfortable in their anatomic and genetic sex and their assigned gender, as indicated by both their intense and relentless wish to change these and their marked efforts to do so. It was equally obvious that these same individuals functioned far more effectively and comfortably in the gender of their choice, as clearly demonstrated by obvious and objective criteria. Gender dysphoria syndrome with an accompanying sub-diagnosis became a more and more frequently used term that was both descriptively and communicatively valid to the members of the treatment team. This seemingly inconsequential change in nomenclature and evaluatory conceptions subsequently proved critical by allowing and encouraging our patients to be honest, open, and candid, with the result that our overall evaluations quickly became truly meaningful. Of course, this only came to pass after patients who were not by any means classical "transsexuals" had received surgical sex conversion as part of total gender reorientation. Once again the grapevine became very active in informing prospective patients that it was no longer mandatory or even necessary to concoct a history or to amend one's own history in order to possibly be accepted into the gender reorientation program. With ever-increasing experience and confidence in the liberalization of previously rigid and truly unrealistic diagnostic criteria, we have as yet had no cause to regret this decision. In reality it was never made as a decision per se, but was reached in an evolving and almost naturalistic fashion. It has now subsequently become a formalized decision. Hopefully, you now know the "how" of the gender dysphoria syndrome.

The "what" of gender dysphoria will now be discussed. In the sub-diagnoses following gender dysphoria syndrome, there have impressionistically emerged four or possibly five distinctive clinical entites, each represented by a patient or patients having received sex-conversion treatment. Three of these five sub-diagnoses have been frequently encountered, and a fourth in a single instance. I will later mention this single isolated case, because it is the most provocative and fascinating from a purely psychological standpoint.

The first sub-diagnosis employed along with gender dysphoria syndrome, is effeminate homosexuality. Many patients have been evaluated who seemingly evolved from effeminate homosexuality to severe gender dysphoria and then on to the point of intensely desiring surgical sex conversion. A lesser number have evolved from non-effeminate homosexuality as well. In this instance I quite obviously speak of male homosexuality. I have compiled ample clinical materials substantiating this concept and will now present a rather prototypic brief clinical vignette.

A 35-year-old, genetic and anatomic male only mildly effeminate as a child presented for gender reorientation. There was no history of childhood cross-dressing. There had existed many fantasies of cross-dressing, but not actual behavior, despite numerous opportunities to pursue such behavior.

In high school the patient did participate in male sports such as varsity track and junior varsity baseball. He admitted to being extremely upset in adolescence by emerging feelings of sexual attraction to males, and these were intensely uncomfortable as he was raised in a staunchly moralistic Roman-Catholic family of Mexican-American extraction. He embarked upon a program of "trying to act like a man" and participated and successfully functioned in heterosexual activities although these were rather limited and allegedly not overtly pleasurable.

He entered the Armed Services at age 25, and subsequently experienced his first homosexual contact or in jargonistic terms, "came out" or "was brought out." At this time he fell in love with a man and they eventually lived together. He began to gradually immerse himself into the gay subculture in the area in which he lived and then, while in his early 20's, initially began to cross-dress occasionally at home. The dressing at home became more frequent and eventually he began public cross-dressing of the "drag queen variety." He began to deeply crave and enjoy homosexual participation and behaved at times in a sexually promiscuous fashion. He indulged in all forms of homosexual activities, yet while seeming to enjoy them erotically, given his moralistic conscience, he experienced both intense guilt and depression.

There occurred a few hysterical suicide gestures in the wake of dissolving homosexual affairs and his family censured him severely and eventually totally alienated themselves from him. There occurred increasing dissatisfaction with the "gay life" and this extremely bright and sensitive person found himself in essentially "a no man's land." The cross-dressing and living as a female became more pronounced and compulsive. He allowed his hair and fingernails to grow long and in his late 20's assumed a femine identity which eventually became the only way in which he was comfortable with either men or women. By now he only enjoyed being around men who treated him as a woman socially and sexually.

He began self-administering illicitly obtained female hormones, and facial electrolysis and changed his legal identity by having various kinds of documents changed from the male to the female gender. All of these acts were done upon his own initiative.

He moved to Southern California where he became known as Delores and began working as a female, and subsequently established a very thorough and staunch female identity. Delores eventually recontacted her family who now accepted her and endorsed her for gender reorientation and sex conversion surgery.

Prior to assuming a total female identity this patient had read about transsexualism in a magazine article, and while still a male, thought to himself, "This is it, this is what I am."

When initially evaluated she was living with an allegedly "straight male" and

had enjoyed a very stable relationship for three years. They had plans to marry and adopt children. She had shown unquestioned ability to cope and function well as a female demonstrated by both a stable social existence as well as a stable job history. When initially evaluated, she had been working as a secretary for a number of years. She was successful socially and vocationally and had many female friends who did not "read her" or restated, these friends fully accepted her as a female. Psychologically her life had improved as she no longer was acting out self-destructively in terms of suicide attempts. She was assiduously studying psychology in night college, and she had totally dissociated herself from the gay community.

This case typifies in varying degrees the many psychological facets seen in a number of patients we have diagnosed as gender dysphoria syndrome, with a sub-diagnosis of effeminate homosexuality. What does seem to vary is the amount of effeminacy. It can be very slight or moderate or pronounced. In this particular instance it was slight. However, what is consistent in all such patients is the absence of early cross-dressing and the presence of an intense homosexual proclivity accompanied by tremendous guilt and based upon familial, societal and psychic censuring and rejection.

A second sub-diagnosis associated with gender dysphoria syndrome is tranvestitism.

The clinical vignette I present involves a 60-year-old "female" who has been a lifelong transvestite. Along with being very successful as a conventionally competitive male, he was both able to function heterosexually and married. By around age 30, he had developed the unrelenting wish to obtain a certain degree of financial security and thereafter establish himself in a totally new identity as a female. This was accomplished when, while in his late 40's, he moved to Southern California.

He had lived for eleven years as a female and was an admired "pillar" of the community in which "she" resided. She presented to us when she was in her late 50's desiring to live the rest of her life as an anatomic female.

In the instances of primary transvestitism, the over-riding behavioristic manifestation is an intense preoccupation with cross-dressing and this is accompanied by tremendous difficulties for a number of patients in terms of disturbed relationships with their families and spouses. Usually, there is a history of multiple divorce, again with the conflict inevitably centering about the cross-dressing and the desperately intense guilt and depression that follows this behavior. There is usually only a minimal or very negligible erotic connotation associated with the cross-dressing and in later life this eroticism is often totally absent.

There are varying amounts of homosexual involvement; in some cases it is quite pronounced, while in others it is entirely absent.

A third sub-diagnosis or classification of patients who have severe gender dysphoria syndrome are those with an inadequate-schizoid personality in which

transvestitism is often, at least early in life, a very minor aspect.

Here I present an individual who was incredibly emotionally deprived as a child, with a rather classically brutalizing, alcoholic father and an "adored and adoring mother."

The patient experienced only rare instances of childhood cross-dressing and in any event this was not problematic. The disruptive aspects of this patient's psychobiography occurred in the area of profound school difficulties resulting in his eventually dropping out, only to be followed by an abortive attempt to successfully negotiate a career in the Military. This, too, proved disastrous and resulted in a dishonorable discharge from the Armed Services.

This patient demonstrated a lifelong inability to develop any kind of meaningful relationship with either a male or a female, and he also was in continual difficulties with the law.

He "almost inadvertently" stumbled upon the fact that by publicly cross-dressing he gained acceptance as a female and beyond this, even admiration. He was quite passable and attractive and for the first time in virtually an entire lifetime, he found his dependency needs were being adequately met.

This patient essentially began a self-rehabilitation program including fulltime cross-dressing, hormone administration and when eventually qualifying for sex conversion surgery, was attending college in the female identity in the pursuit of a degree as a registered nurse.

This particular sub-group evidences schizoid alienation, low-tolerance for any stress, much acting out and minimal or absent early cross-dressing and/or homosexual preoccupation.

The last diagnosis to which I'll turn my attention is gender dysphoria syndrome with recovered psychosis or psychosis in remission.

Early in our program we eliminated for treatment consideration any individual who had a past history of active psychosis, only to discover a patient who we were initially not willing to accept because of a history of three horpitalizations for paranoid schizophrenia along with multiple electric-shock treatments, but otherwise seemed to be a highly suitable candidate for treatment.

Following his last discharge from a Veterans Administration Hospital inpatient psychiatric service, this patient decided to live out his so-called "somatic delusion" of being a female and subsequently had been totally free of any psychotic symptomatology and had remained free of symptomatology for the ensuing ten years. This "cure" occurred without the use of any anti-psychotic medications and has been documented by three different qualified psychiatrists.

For the last ten years this patient had functioned exceedingly well as a female, having obtained a Doctorate Degree and was leading a productive and

meaningful life. She was initially refused sex conversion surgery and placed on a holding status for one and one-half years despite the fact that there was adequate documentation of ten years of cross-gender living with no evidence whatsoever of psychosis.

It was, however, with great trepidation that we did perform sex conversion surgery and to my knowledge to date she has done extremely well. We must, however, bear in mind that this particular patient did quite well for a ten-year period in which she was merely participating in cross-gender living previous to sex conversion surgery.

The last group of patients included in gender dysphoria syndrome are fortunately rare in our experience, as we have only encountered two. These are individuals who are blatantly exhibitionistic sociopaths and have presented very obviously to gain gender reorientation and sex conversion surgery as a means of creating sensationalism with the hope of ensuing "fame and fortune."

The vast majority of patients who qualify for primary diagnosis of gender dysphoria syndrome, as opposed to transsexualism, are people who themselves rush to embrace the diagnosis of transsexualism. Despite our living in an age of relative permissiveness, both homosexuality and transvestitism are still affectively experienced by many patients and their families as painful and inexcusable moral perversions or fetishes. In both the effeminate homosexuals and transvestites that we diagnose as gender dysphoria syndrome, there is the glaringly apparent presence of a strong and punitive conscience or superego. This continues to be a striking phenomenon.

By conceptualizing our patients as having gender dysphoria syndrome, we have obviously liberalized the indications and requirements for sex conversion surgery. Only further study, currently being conducted in terms of follow-up and re-evaluation of patients who have had this form of treatment, will prove whether this liberalization is warranted and justifiable from a rehabilitative standpoint. To date, our empiric and clinical evidence is positive and encouraging.

Transsexualism: A Perspective

Marie C. Mehl, Ph.D.

Transsexualism is a term attributed first to Cauldwell (1949) and then to Benjamin (1953), who reintroduced the term to describe a group of patients he had been treating. Transsexualism is a two-fold definition referring to: (a) a person who psychologically feels intensely that he (or she) belongs to the sex opposite that which was assigned at birth. Psychically, the condition is experienced as a gross incongruence between the individual's anatomical sex and his feeling of maleness or femaleness; i.e., gender; (b) The behavioral aspects of the term manifest themselves as the person persistently attempts to live as a member of the opposite sex, seeks hormonal correction and obsessively pursues the sex reassignment operation.

This phenomenon of gender role dysphoria has existed since antiquity in literature, and anecdotes about individuals who dressed in clothing of the opposite sex and assumed the role attributed to the opposite sex are plentiful. The differentiation of transsexualism from transvestitism was not possible until systematic sexology was established in the late nineteenth century. Since the term transsexual is of recent origin, inferences must be made in interpreting historical references. Green (1969) cites Philo's account of gender identity and gender role dissatisfaction among Romans who can, in the light of our systematic sexology, be ex post facto diagnosed as transsexuals:

> Expending every possible care in their outward adornment, they are not ashamed even to employ every device to change artificially their nature as men into women . . . some of them . . . craving a complete transformation into women . . . have amputated their generative members (p. 14).

In the 18th century the Chevalier d'Eon was a rival of Madame de

Pompadour for the attention of Louis XV. He spent 34 years as a woman and 49 years as a man. Brown (1961) reports that America, too, had prominent cross-gender role persons. The first colonial governor of New York, Lord Cornbury, came from England fully attired as a female and remained so cross-dressed during his time in office.

Hoyer (1933) is the first to give a biographical report of a sex reassignment to alter genitalia under medical and surgical supervision. The noted British sexologist, Norman Haine, wrote the introduction, thus making Hoyer's book a semi-medical contribution (Benjamin, 1969). This case was of the Danish painter, Einar Wegener, who became Lili Elbe.

The next most important milestone in the history of transsexualism was the highly publicized Christine Jorgensen case. This case, headlined in 1952 in the United States and throughout the world, dramatized the dilemma of transsexualism. The Journal of the American Medical Association published an article by Jorgensen's group of Danish physicians, which included the endocrinologist, Christian Hamburger. This article described the nature and treatment, including surgery, of transsexualism (Hamburger, Sturup, and E. Dahl-Iverson, 1953).

Johns Hopkins organized a Gender Identity Clinic which was announced in the New York Times in 1966. This was followed by various university teams throughout the country.

The etiology of transsexualism is currently a matter of controversy ranging from physical to psychological hypotheses, depending upon the investigator's individual bias. The final answer will probably prove to be multi-dimensional rather than a simplistic one-to-one relationship. The causal dilemma is at least partially due to the insensitivity of our measuring instruments. The transsexual is generally found to be hormonally, genetically, and morphologically of one sex, while psychologically of the opposite sex. John Money (1970) believes "the most likely etiological explanation is that transsexualism is an extremely tenacious critical-period effect in gender-identity differentiation of a child with a particular but as yet unspecifiable vulnerability."

There is no mental nor psychological test which successfully differentiates the transsexual from the so-called normal population. There is no more psychopathology in the transsexual population than in the population at large, although societal response to the transsexual does impose almost insurmountable problems. The psychodynamic histories of transsexuals do not yield any consistent differentiation characteristics from the rest of the population. However, the condition usually, although not always, appears at a very early age. The symptoms are often masked within the family dynamics and go un-noted or even covertly encouraged. School attendance brings the cross-gender attitudes, interests and behavior to public attention. Most

transsexuals report pre-school cross-dressing, preference for the toys and games of the opposite sex, preference for the companionship of the opposite sex and a feeling of being different from children of the same sex. These memories have been checked in many cases with reports from close relatives, so the effect of retroactive falsification is minimized.

The problem in differential diagnosis of transsexualism in the male is to distinguish transsexualism from transvestitism and effeminate homosexuality. The criteria of diagnosis are behavioral and phenomenological and can only be gleaned from in depth interviews with the patient and family. In general, however, the transvestite is heterosexual in object choice; the homosexual prefers sex objects of his own sex. The transsexual is repulsed by his own genitalia, and in marked contrast to the transvestite and the homosexual, desires the sex reassignment operation to rid himself of the hated organs. These are idealized differentiations and, in fact, considerable blurring exists in the transition areas between these points. The transvestite after years of cross-dressing may become confused as to his gender identity. Cognitive dissonance may cause him such discomfort that he seeks to resolve his ambivalence by opting for transsexualism. Or the effeminate homosexual may be so socially pressured and stigmatized that he decides to cross over and become a transsexual. This is why careful diagnosis is essential.

The prevalence of transsexualism is difficult to establish. In an investigation in Sweden, Walinder calculated the prevalence at 1 in 37,000 men, and 1 in 100,000 women, or, in total, 1 in 54,000 persons over 15 years of age. He points out that this is a minimal figure and comprises only the number of transsexuals who have consulted a physician. Walinder's experience indicates that the actual frequency is at least twice as high.

Another available statistic is from Johns Hopkins. After the initial publicity in 1966, the Johns Hopkins Gender Identity Clinic received 1500 transsexual inquiries within two years. The ratio of male to female was approximately 3:1. This ratio is misleading, and newer figures indicate a trend toward a 1:1 balance. It is speculated that our social structure is more permissive toward women cross-dressing and participating in male activities and this masks some female transsexuality.

Jon Money (1970) lists the criteria for the selection of patients for the sex reassignment operation chosen at Johns Hopkins Gender Identity Clinic. These criteria are typical of the various gender identity teams throughout the United States:

1. The patient must have lived in the desired sex vocationally and socially for a long enough period of time to prove his (or her) ability to function in society in the changed sex.
2. The patient must be at least 21 years of age and a U.S. citizen.
3. The patient must have a clean police record, though impersonation

convictions are allowable.

4. If the patient had a history of temporal lobe epilepsy, he would require a neurosurgical work-up, with a view to relief of both seizure and psychosexual symptoms as a sequel to brain surgery.
5. The patient must be legally free of any previous marriage bond.
6. The patient must live within accessible traveling distance of the Johns Hopkins Hospital in order to insure conscientious follow-up.
7. The patient must designate a next-of-kin as an additional informant willing to give written operative consent. The reason for this rule is (a) to safeguard against erroneous personal and social history-giving, (b) to safeguard against malpractice charges on the part of the next-of-kin, (c) to have the guarantee of at least minimal family acceptance of the operated patient, should there arise an emergency in the future, and (d) to improve the social chances of rehabilitation.

The rule of living in the role of the opposite sex for a minimum of one year is a requirement of most gender identity teams in the United States. This probationary period gives the patient and the doctors an opportunity to test reality and assess the adjustment of the patients to the demands and changes of the new sex role. During this period, the patient usually undergoes hormonal therapy for the suppression of existing sexual characteristics and development and maintenance of the opposite gender's phenotype. Estrogens and progestins are administered to the male. These achieve a decrease in libido, decrease in erections and ejaculations, increase in breast tissue and in the pigmentation of areolae and nipples, redistribution of the subcutaneous fat to correspond to the female pattern and decrease in muscle tone. The female is given androgens, which result in a decrease in menstruation, deepening of the voice, increase in libido and increase in body hair growth, including the face. Patients report that hormones also have a tranquilizing effect.

The probationary period brings with it innumerable problems—economic, social, vocational and legal. Although psychotherapy is ineffective in reversing the condition of transsexualism, supportive therapy is particularly helpful during this trial period. There would be no justification for following through with the sex reassignment operation unless the patient demonstrates better adjustment in the newly chosen role than in the former role, yet practical and social pressures make this demonstration difficult to achieve.

The rate of criminality among transsexuals conforms to the rate in any other population. However, inherent in the syndrome and behavior patterns which attract the attention of the law, criminal problems originate from such activities as wearing clothing of the opposite sex (particularly prior to surgery) and having sexual relationships with persons of the same sex. One preventive measure used by many transsexuals is to carry an identification card issued by the Erickson Educational Foundation and a letter from a physician describing

the condition. The post-operative patient has less trouble with criminal law, but many legal problems such as change of birth certificate and other documents.

If the patient passes through the probationary period successfully, the sex reassignment operation may then be performed. This consists of surgical castration in the male and the construction of a vagina and labia from the skin of the scrotum and penis. Surgery in the case of the female consists of bilateral mammectomy, hysterectomy and salpingo-oophorectomy, which may be followed by phalloplasty. An externally morphologic male or female is adequately simulated as a result of these procedures.

Publicity and surgical and psychological sophistication concerning the medical entity, transsexualism, has not led to consensus by professionals nor laity. The deep-seated sexual fears and the entrenched mythologies of clear-cut sexual dimorphism—be it social, biological or psychological—still prevail. These make layman and professional alike prey to their own internal confusions.

Sex Vs. Gender

Virginia Prince, Ph.D.

Sex and gender are not the same thing. We are born into a society that is highly polarized and highly stereotyped, not only into male and female, but into man and woman. Man and male, female and woman are considered synonymous pairs of words for the same thing. They are inseparable. But it is not so. Sex and gender are *not* the same thing. Money and the Hampsons were the ones who first showed this in their study of pseudohermaphrodites. Somehow or other, people have not been able to digest this, to put it into practice. For example, the other day the expressions, "surgical gender reorientation," "gender conversion surgery" and "anatomic and genetic gender" were used. No one of these three expressions is even possible, let alone sensible. Why do we not learn to talk about gender when we want to talk about gender and talk about sex when we want to talk about sex?

I have heard people say that somebody was living in the female role before surgery. As a matter of fact, the definition of transsexuality in Money and Green's definitive book says, "The phenomena of living in the role of the opposite sex before or after surgical sex reassignment and hormone therapy." It is impossible, I submit, for anybody who is a male person by the possession of a penis to live in a female role before surgery. After surgery, he can. What was meant was the "feminine role–gender not sex." How can we have intelligent communication in this area when the definitive book on the subject does not make the basic distinction between a life style and genital anatomy?

The last two Erickson symposia as well as this one have given me a figure that out of 100 people applying for a surgery perhaps only 10 percent of them should really have it. If so, then there are nine people who have something wrong in their heads, figuratively speaking, compared to the one that the doctors eventually accept for surgery. Therefore, there are nine times as many

reasons for doing rehabilitation on those people as there are for doing surgery on the 10 percent. I believe it was Dr. Laub who said that rehabilitation starts with the first call. The implication is that rehabilitation needs to be done on everybody that calls, not just those accepted for surgery. That is very good and a step forward. It is very important to ask yourselves what goes on with these people. What makes 90 people whom you do not consider suitable cases for surgical reassignment come up with the idea that this is what they need?

I suggest that a very considerable part of this, is that those individuals do not understand the difference between sex and gender. There are a great many people from my side of the street, which is the transvestite side, who really want to be women, but they think that the only way that you can be a woman is the way that mother made it. If you are a female, then you can be a girl or a woman. You all have histories where people report that, "Ever since I was this high, I used to pray to God that I would wake up in the morning a girl." I asked these people, "So you made this prayer. Suppose you woke up the next morning and your penis and testicles were gone and you had a vagina. You had the same clothing, took the same books to school, went to the same class, played the same baseball games with the boys and did everything that you did the day before. Would you think that God had answered your prayer?" They would say, "Well, no I didn't want that. I wanted to be a girl."

The concept of girlness and femaleness are blurred together. What they are seeking is gender change, but not a sexual change. But they think that you cannot get one without getting the other. I was pleased to have Dr. Fisk use the term "gender dysphoria syndrome," but if it is truly a matter of gender dysphoria, why do you not offer a gender solution instead of a sexual one? What you really have is a "sexual dysphoria syndrome." We have sexual identity clinics in which people are examined, selected, screened, and finally have surgery performed on them which changes their sexual identity. When they can look down and say, "I am no longer a male. I am a female," then they feel they can be women. Then they can do what they wanted to do all the time. It seems a very sad thing to me that a great many individuals have to go to the expense, pain, danger, and everything else when they could achieve a gender change without any of it. For those of you who do not know me, I am a male. I was born one and I will die one. I am not a homosexual. I am not a transsexual, but I have lived the last five years as a woman. There is not one thing that any doctor or any surgeon at this symposium could possibly do to improve my gender. Any kind of carving that you might do on me might change my sex, but it would not change my gender, because my gender, my self-identity is between my ears, not between my legs. We very badly need to have an understanding on the part of the profession as to just what these people are seeking to achieve. You should get clear in your own mind the difference between sex and gender, so that you recognize when somebody is

really seeking sex change surgery for sexual intercourse purposes, and when they are primarily seeking to change their gender. Then you will be in a better position to provide the particular help they need.

I like the word "dysphoria," but I would like to have you think of distinguishing sexual dysphoria from gender dysphoria. They are different and people should be treated according to which one they happen to be suffering from.

Discussion: Dr. Prince

The big trouble with words like homosexual, heterosexual, bisexual, transsexual and transvestite, is that they are words describing what somebody does. Being a medical group, you will recognize how stupid it would be if people were diagnosed as having had fever disease. Any number of conditions have a fever as one of the symptoms, but if you took that symptom as common to a lot of people and referred to fever disease, you would not get to first base in practicing medicine. You have to distinguish smallpox from malaria, both of which have a fever.

I would like to suggest that our problem is that when you use the word transvestite, which is simply Latin for cross-dresser, and you put it back into English and use cross-dresser, that only partly solves the problem. It is possible to make sorts, but not on the basis of what people *do.* You make the sorts on the basis of what people *are.* The kinds of persons that Hirschfeld originally meant when he coined the word, transvestite, were heterosexual cross-dressers. We should think in terms of what motivates these people to do what they do.

I coined the word "femiphile," meaning "lover of the feminine," to describe what these people are doing and why they are doing it. Supposing just as a suggestion, instead of calling somebody a homosexual, you referred to them as being "penis oriented." That is to say, people who look to someone else's penis as a source of their sexual pleasure. That would also include normal "females" who also look to a penis as the source of sexual pleasure, but "normal females" and homosexual males have this in common. This describes what motivates them, not simply what they do.

There are people who cross-dress because they want to achieve femininity, to experience womanhood, or change a gender role. There are others, the so-called "transsexuals," who cross-dress because they are firmly convinced that they should be of the opposite sex. Finally, there is a third group who use cross-dressing as a mechanism in the selection and attraction of a sexual partner. These three are *not* the same thing. They are just *doing* the same thing.

The world that we live in is highly polarized and highly stereotyped into femininity and masculinity. What I would like to have you think about is the

word in the middle, humanity. A man who wants to look after babies is only being a human being in dealing with young offspring. It has nothing to do with his being a male and not a female, and that is the problem in this area of sex and gender. This high degree of polarization in our society leads to all kinds of confusion in our culture. We must learn that being a person is more important than being either man or woman, male or female.

Consider the trends in society today: Gay Liberation seeks to teach the public in general that being a homosexual is no better and no worse than being a heterosexual. The movement is toward a more liberated and accepting society. The effort of Women's Liberation is to make people understand, particularly the men, that women are people too, that they have the same potentials, the same capacities to go places and do things that men have and should not be limited by the fact that they are potential mothers.

Society is moving in a direction where all of us sitting at this table are obsolescent (homosexuals, transsexuals, transvestites, and heterosexuals). Your practice is obsolescent too, because it will not be too many years in the future before there will be no transvestite, no transsexual, no homosexual. At that point, no doctors will be necessary to take care of them for the simple reason that they will all be just people. We will not have to be climbing over the fence of ignorance and prejudice to find living space. We will not have to worry about being isolated and documented and sorted into this kind and that kind. When any two people can have whatever type of sex they choose with whomever they choose, who is homosexual and who is heterosexual? When men catch up with women in terms of Men's Liberation—when men can have the choice of looking in their wardrobe in the morning and selecting a long or short dress or a pair of pants, with the same ease and comfort that a woman today can look in her wardrobe and see if she is going to wear a long or short dress or a pair of pants—we will have reached the point where what you wear will not be a uniform to indicate what you are. We will then have no such thing as a transvestite. How can you cross a boundary that does not exist? We are on our way out, all of us. The big problem is how do we get there in the easiest way and how do we help people make this journey as comfortably as possible.

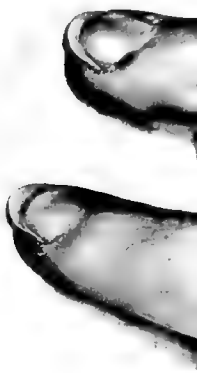
* * *

Transvestism is, unfortunately, generally defined in its most primitive manifestation, that of sexual arousal from wearing feminine attire. Everybody is a child before they are an adult and everybody is an undergraduate before they are a graduate. While it is true that every transvestite knows about his being turned on emotionally and sexually by the clothing, there is more to it than that. If that is to be the sole criterion for who is a transvestite, the true nature of the condition will be completely overlooked.

The true transvestite is not a homosexual. I would like to have everybody dealing with the subject of transvestitism to understand that this is primarily a

gender manifestation, not a sexual one. The fact that as a small child and as an adolescent, they are turned on by clothing, is only the very beginning. It is not the end of it. We have a great number of men transvestites who are 70, 80, and almost 90 years old. I can assure you that they are not turned on sexually by putting on a pair of panties. The trouble is that those who have achieved some understanding of their feminine self do not often present themselves to psychiatrists. Thus, the awareness of this facet of the problem escapes the attention of the therapists and so does not appear in the literature.

The man who described it in the first place, Hirschfeld, coined it to describe heterosexual cross-dressers. It should be used properly, but it is too often used simply to define behavior and not motivation.



Gender Envy

Fred D. Oremland, M.D.

Historically, there is only one natural occurring graft in the human being and that is the fetus. Correspondingly, there are no known varieties of "corn" that can exist without man's help. These observations embody ultimates in a plant and the human.

The procedures for cultivation or impregnation are not difficult; however, the motivations and protoplasmic reactions are most difficult to understand because of variation, developmental changes and a chemical matrix which deals each time with the concept of *life* and *death.*

One cannot just glance over mythology, be it Greco-Roman, Oriental or relative prehistoric findings, without slipping into cauldrons of information. These sources are important in theory or translations to language, terra cotta, metals and stone such as marble. The concepts are so fundamental that relationships between the present and the past become vivid and vital. One can look back to the savage tribes of Scythia or the unisex of Sausalito and the nature of procedure becomes familiar, but the science of motivation suffers in its own ignorance and must continue looking for those few islands of delightful "facts" that can be demonstrated, reproduced and open new and unknown sealed areas. Great attention has not been paid to the science of sex; nor has it been ignored. Many findings have been established with competence and provide a perspective that does not spring entirely from social origin.

Sexual differences on the cytogenic level have been demonstrated by the works of Humphrey on amphibians, Barr and Bertram with their discoveries of "diagnostis chromosomes" in the cat, and from the work and exposure of idiograms establishing the human chromosomal count at 46 rather than 48. The variations—mostly bad for the individual—described by Turner, Ford, Klinefelter, Wilkins, De Court and many others leads to the conclusion that

"nature" may emphasize its blunders in the form of humans that do not and cannot conform to a given set of rigid standards. Eponyms have been used to comply with deviations and they are often misleading to the point of diminished endeavor—a fatal mistake for the scientist and his work. Karyotypes are, of course, an artificial grouping of chromosomes based largely on their size or morphology in a particular state of maturation. Unhappily, they tell very little about the exact number of genes.

Genetic sex is microscopic; phenotypic sex is anatomical and physiological. Mental sexuality is open to picturalization and largely influenced by each individual in terms of society and anxiety.

It is important to note that karyotypes are the darlings of the printed page and its pictures—not the living cell. The particular procedure now in use came from excellent work in Japan. Hypotonic solutions were used, the cells crushed, and magnification placed the carrier type from the large chromosomes to the small ones. These neat clumps do not exist in the cell and are manufactured for presentation, not reality.

Lilly's observations in 1916 probably formed the foundation of a new perspective for investigating sexuality. This work was done on cows and, most especially, abnormal heifers which were called "freemartins" or "chimeras." Both the hormonal and immunological responses became apparent in the ensuing years.

In a curious way, sexuality can be looked upon as a genetically determined defect which robs the individual of one primary function or another. As in most ecobiological areas, male and female systems operate in ubiquitous social and physical environments.

The clinician must consider therapy when he is certain that one exists. *Gender envy* is a functional part of the human mind and is not exotic or rare. It is not, but it can become, a psychopathological mode of gratification. As a developmental phase it is auto-erotic, and only when it becomes a predominant factor in gratification can it be considered for surgical therapy.

Sexual dysfunctions are relative to organic syndromes and ambivalence. At the very least, they interfere with procreative functions and offer various profiles of defense against the unwanted fetus or its surrogates. It is important that the concept of male or female does not rest on dysfunction, but remains close to function.

When gender envy becomes linked to the opposite somatic sex, it will displace child-bearing conflicts. The narcissistic armor will be present, but excessive amounts of internal and external anxiety will come forth as phobic compulsive behavior. This is fundamental to understanding why an individual requests sexual alteration. Economy of time prevents further elaboration about this type of psychic organization. However, it must be mentioned that "homosexuality" can not only be cured; it can be prevented.

Gradually, hormones, surgery and psychotherapy are replacing jails, death and various forms of torture.

Freud's work on "homosexuality" is well known for its excellent descriptions and limitations regarding the prognosis and responsibility that should be assumed, but there is a good reason not to accept this as definitive. Not many years ago, lepers had to wear clappers in order to announce they were in the area. Etiological agents were either bacteria or a virus. At the present time, some enzymes act or become very similar to the concept of a virus. Perhaps some day it will be possible to find a gene or a combination which will explain various codes of behavior. So far we are not especially close.

When a person requests a change in somatic status, the criteria must be balanced against techniques available, and there is no further need of technical triumphs over judgment. Sexuality is, for the most part, losing its mysteries, but the rate will have to be accelerated. When a "male" insists on having an opposite likeness, it is possible. Hormonal therapy and surgery become companions and when the scars are healed the disease will be altered—not cured. There is great difficulty in the resolution of oedipal components. Much of this phase is complicated by the transition of parents to surrogates, and imitation becomes reality. The method by which this is transmitted is hypertrophied rationalization, hostility and a constant renunciation of guilt.

This often is translated into depersonalization, intellectual reverses, a marked reversal of affect and a highly stylized form of fixed rationalizations.

As the pattern becomes more formidable, estrangement from the body is excited and the person becomes a hated stranger to his or her body. This is more easily understood in terms of social isolation or desolation, occupational difficulties, drugs, financial truancy, suicide attempts and a moderate degree of sexual satisfaction. The adaptive function of the mind in distress finds help in maintaining an image that "should have been," rather than actual perception with structural imbalance.

A Comparison of Transsexuals and Non-transsexual Homosexual Males[1]

Kurt Freund, M.D., D.Sc.

Our study at the University of Toronto examined transsexual males for gross sexual deviation and the reasons they sought sex reassignment surgery. We then compared this group with non-transsexual homosexual males on the rate of homosexual development and heterosexual experience. Finally, both groups were compared with heterosexual males on parental loss in childhood and parent-child relations.

By definition, transsexual males represent an extreme in feminine gender identity which is also present to a lesser degree in many non-transsexual homosexual males. In a previous study of non-transsexual homosexual males, a preference for physically mature partners (as opposed to pubescents) was associated with a higher degree of feminine gender identity. Earlier onset of homosexual development and less heterosexual experience was reported. It was, therefore, expected that transsexual homosexual males would prefer physically mature partners, be androphilic, and indicate an even earlier onset of homosexual development and less heterosexual experience than non-transsexual androphilic males.

The first 57 males who applied at the Clarke Institute of Psychiatry for sex reassignment surgery were administered a sexual deviation questionnaire. Five subjects were excluded because they were transvestitic and heterosexual. In some cases, a psychophysiological method, the phallometric test of sexual object preference, was also applied. This method is based on a recording of penile volume changes while the subject observes pictures of various potential sexual objects. The non-transsexual, homosexual comparison group consisted of 205 volunteers and the heterosexual group was composed of 194 volunteers.

All of the 52 transsexual homosexual males indicated a preference for

physically mature partners and all of them were androphilic. A comparison of transsexuals and the same number of non-transsexual androphilic males, matched as to overall output on the phallometric test, showed that the transsexual males reacted less to the pictures of pubescents than did the non-transsexual androphilic males. The transsexual subjects also indicated an earlier onset of exclusively homosexual interest and less heterosexual experience than did the non-transsexual androphilic males. All of the transsexual males indicated a preference for heterosexual male partners, with one exception—a patient who stated that he did not care whether the partner was homosexual or heterosexual. Only 14 percent of the non-transsexual males indicated a preference for heterosexual male partners; an additional 13 percent indicated that, for them, it did not make any difference whether their partner was homo- or heterosexual. However, with the non-transsexual androphilic group, the correlation between preference for heterosexual male partners and degree of feminine gender identity was quite weak, even if significant.

The degree of feminine gender identity may, in fact, be the only basic difference between transsexual and non-transsexual androphilic males. In order to test this hypothesis, an attempt was made to rule out factors which could be the basis of transsexualism or the request for sex reassignment surgery, other than the overwhelming desire to have a female body. These include the presence of the gross deviations of narcissism, masochism, and transvestism, an aversion of the applicant to his own penis, or the desire to better suit heterosexual male partners. The reasons for testing for gross narcissism was the transsexual male's preoccupation with his own person. The reason for testing for masochism was the frequent occurrence of gross feminine identification in heterosexual masochistic males. An attempt was also made to investigate whether there is such a clear-cut difference between transvestism and transsexualism as is usually supposed.

According to questionnaire data, there was no indication that an aversion to one's own penis, a desire for heterosexual male partners, or the gross sexual deviations of narcissism, tranvestism, or masochism played a substantial part in the transsexual syndrome or in the application for sex reassignment surgery. The absence of narcissism or transvestism was checked in 11 subjects also by comparing phallometric response to their own pictures in the nude and in female attire, with response to pictures of other males. The reactions to their own pictures was significantly lower than to those of other males.

Degree of feminine gender identity seems to be the only basic difference between transsexual and non-transsexual androphilic males.

Transsexualism reflects an extreme inability to identify with one's somatically prescribed gender role. On the assumption that this was caused by a physical or emotional nonavailability of a father figure, one would expect that unreplaced father loss would be more frequent among transsexual than

among non-transsexual androphilic males, and that the same should apply to a poor father-son relationship. Therefore, transsexual and non-transsexual androphilic males were compared also on these and related data.

There were no significant differences between transsexual and non-transsexual androphilic males in regard to unreplaced loss of father or mother, or as to whether the subject was raised by foster parents or relatives. There were also no significant differences in regard to father-son and mother-son relationships (measured by scales derived from the questionnaire) and closeness of father and mother. However, when comparing the non-transsexual androphilic males with heterosexual subjects, the homosexual subjects had significantly more unreplaced loss of father or mother and were more often raised by foster parents or relatives. This might be explained by the findings of Slater and Abe and Moran, that the age of fathers was higher at the birth of homosexual sons than at the birth of heterosexual sons.

The homosexual males more often had a poor father-son relationship. Additionally, they were less close to their father and more close to their mother than were the heterosexual males. These differences between homo- and heterosexual males do not specifically support either the environmental or biological hypothesis of transsexualism.

The fact that there were no significant differences between non-transsexual and transsexual androphilic males, in regard to unreplaced parental loss and relationships to parents, may raise the suspicion that learning excessive cross-gender identification might depend on factors other than father-son or mother-son relationships.

This study was carried out in cooperation with Ron Langevin, Ph.D., Yaroslaw Zajac, B.A., Betty Steiner, M.B. and Andrew Zajac, M.D. It was supported by grant No. 403 of the Ontario Mental Health Foundation, Toronto, Canada, and will appear in detail elsewhere.

Some Thoughts on Nosology and Motivation Among "Transsexuals"

Jon K. Meyer, M.D.

During my four years as Director of the Gender Identity Clinic at Johns Hopkins Medical Institutions, we have had a well-studied series of 100 cases. Forty-five have been operated on, 36 males and nine females. An attempt is now being made to see these patients in intensive follow-up. The earliest date of an operative procedure at Hopkins was 1960, but a few of the patients had surgery in Europe prior to that. The rest were operated on since 1965 or 1966, but largely prior to 1971. While there is a substantial follow-up period, my remarks reflect an incomplete study.

There are two related areas I want to comment upon: (1) diagnostic classification and (2) motivations of applicants for sex reassignment.

I have the terms "transsexualism" and "transsexual" both written in my notes in quotation marks. I find that I really cannot use them without quotation marks any longer, because I am no longer confident of their meaning. There was a time when I was more confident. At that point, I used Stoller's definition of "transsexualism" which is familiar to most of you. It shortly became clear, however, that patients falling into the gray areas surrounding the diagnostic category were far more numerous than those fitting the nice typology. In our series I have not knowingly seen a patient fitting Stoller's description in all historical and clinical particulars. To take an important example, I have not, to my recollection, had a parent *retrospectively* describe the peculiar type of symbiotic early mothering Stoller emphasizes. The presence of this type of neonatal and pre-oedipal mothering is theoretically important in understanding the patient's incorporation of an unconflicted feminine identification—a reversal of core gender identity. If such an early mothering experience is not present, and when the cross-gender identification occurs later, one might assume that the cross-gender role is laden

with conflict. We may then be operating upon individuals with a conflicted gender identity, rather than a reversed one. I am not at a point yet where I can go further into the questions this raises about our procedures.

It has frequently been said here that the term "transsexualism" has come to encompass a variety of conditions that under other circumstances might be labelled extremely effeminate homosexuality, transvestism (particularly conscience-ridden transvestism), schizoid or borderline personality disorder, polymorphous perverse psychopathy, as well as individuals who apparently have manifested lifelong cross-gender drives--the classical "transsexual." Other types of patients occasionally found among applicants for sex reassignment are obsessional neurotics with profound masochistic trends, notoriety seekers, vocationally motivated homosexual prostitutes, borderline patients, and the overtly psychotic.

The point is that the label "transsexual" has come to cover such a "multitude of sins" that all one knows when the term appears in the literature is that the patient has presented requesting sex reassignment surgery and labelled himself as transsexual, and the physician has accepted that self-diagnosis.

Some might take the position that this is well and good. What else could one require from a term? The problem is that patients in these previously-mentioned categories, having arrived at the desire for surgery through a variety of pathways, may well react differently over the long term to sex reassignment. It would seem that a conscience-ridden transvestite might react differently to the reassignment procedures than an effeminate homosexual or a schizoid individual. If diverse patients are lumped together under the term "transsexual," there will be no way of going back later to make potentially useful prognostic distinctions.

The general position in the field is that we simply do not know enough to prognosticate. By a curious logic, this lack of expertise is used to justify operating upon a broad spectrum of individuals with little effort at selection other than the patient's self-diagnosis. This is a little strange in a clinical area now at least a decade old. I hope this situation will not continue too much longer.

One of the most useful steps that any national organization of gender teams might take is to develop, and obtain general agreement on, the necessary nosological categories for classification of our patients. Only through such a step will the various series eventually be comparable. They are not at the present time.

With regard to classification, I might make two preliminary suggestions. The label "transsexual" sounds very medical, as though it really had a specific meaning, as though it referred to a well-defined clinical entity. Although I do not believe this is the case, the term is in such common use that I do not

believe it will be abandoned. However, for scientific purposes I would suggest that the label be reserved for those individuals who have completed genital reassignment; in these circumstances it will refer only to an anatomical *fait accompli.* The term would have no implications regarding etiological factors, psychodynamics, or formal diagnostic classification either preoperatively or postoperatively. It would refer only to an anatomical fact.

To generally denote the group of preoperative individuals (a very mixed group), I would like to suggest the term "eonist," a medical eponym which means simply a person who manifests a desire to live in the cross-gender role or in fact gradually assumes cross-gender occupations, dress, and other activities. It is a vague term, and fits a vague situation.

To proceed to the issue of motivation for sex reassignment, in my experience there are a variety of motivations which break down into two basic groups—the overt and the covert. The overt have to do with discomfort in the anatomically-congruent role, fear of discovery and embarrassment, the desire for socially sanctioned union with the same sex, and the wish for a stable family life. There are also certain frequent covert motivations; for example, a sense of not knowing who or what one is, with gravitation toward the transsexual position as a means of imposing order and structure on intra- and extra-psychic life. Another is what might be called the syndrome of "marching to a distant drummer," as follows: my mother or father always wanted a boy so if that is what they want, I will give it to them. Thirdly, there is the search for castration and penectomy, or hysterectomy and oophorectomy, in order to take revenge on important figures, much like the hysterical or histrionic suicide attempt. Suicidal urges are partially alleviated by giving them partial expression. There is the masochistic position, in which removal of important anatomical structures is by way of self-punishment. Finally, sex reassignment may be sought as an attempt to assume an extremely passive and dependent position; i.e., to have attention and love in unending supply without exertion. These covert motivations are found more in some patients than others, but they have been cropping up more frequently in follow-up than might be expected.

To summarize, there are a number of discernible clinical types among the "eonists," on the basis of their clinical presentation, past adjustments, overt and covert motivations. In developing a nosology for such patients, these factors must be taken into consideration. The development of an adequate nosology is an essential first step in achieving the ultimate goal of comparable follow-up series and, eventually, establishing prognosis.

II Etiology of Transsexualism

Boyhood Antecedents of Adult Transsexualism

Richard Green, M.D.

We all know the problems of history-taking with adult transsexuals with its questionable validity. "As far back as I can remember, I always felt like a girl. I cross-dressed and role played as a female." This is the typical life history as reported. Occasionally, we obtain from the adult some validation of an earlier cross-dressing experience. For example, we have a picture taken at about age three of a now adult transsexual who remembered being cross-dressed. His parents denied cross-dressing him, but he was able to go back to the family album and retrieve it. He brought it to us for corroboration. More often, however, relatives or now grown siblings are unavailable. Consequently in the search for the etiology of atypical sex role adoption, we have utilized a unique research strategy. It has been to generate a population of preadolescent males who are behaving similarly to that retrospectively described by adults who become male-to-female transsexuals.

At UCLA during the past six years, we have evaluated 45 anatomically normal boys who are decidedly feminine in their behavior. Their age range is four to ten years. They are reported by parents to have a considerable interest in dressing in women's clothes or improvising feminine costumes. They strongly prefer girls as playmates. They role-play typically as a female in fantasy games. Their preferred toys are dolls. They may show feminine gestures and mannerisms and have said they want to be girls.

These boys differ significantly from other males their age. Their interest in feminine attire, toys, or activities is not an occasional preference or an occasional role-playing. Rather it represents a compelling orientation toward a variety of culturally feminine behaviors.

Some children do not have direct access to feminine clothes and will improvise feminine attire from what is available. One of our boys improvises

women's long hair from towels, another from a hooded jacket. Another boy improvises dresses from his father's T-shirt; another from large towels. A variety of other items have been pressed into service for improvisation. Felt tip marking pencils can be used for nail polish, and blocks can be inserted into slippers to simulate high-heeled shoes.

The age at the time of initial evaluation of our feminine-boy sample has been skewing downward as the project has become more well-known. Initially most of our subjects were between eight and 10 years of age. Parents procrastinated for several years before consulting us because of the idea that their son's behavior was a normal passing phase. However, now at least half of our subjects are under the age of seven, and we have been referred some children as young as four.

The age of onset of cross-dressing, as recalled by the parents, is very young. While half of the subjects were between seven and 10 when initially seen, the age of onset of cross-dressing in no subject was after the sixth birthday, and in the majority of cases, the cross-dressing commenced before the fourth birthday. This indicates then that the developmental timetable for sex-typing is essentially on course for these boys as it is for typical children, but that the direction is skewed. This early onset might also tell something about the prospects of behavioral change by these children. Extrapolating from the Money and Hampson (1955, 1957) and Stoller (1968) data on the irreversibility of early gender identity in hermaphroditic children, if an early critical developmental period exists in these children as well, it would portend little options for behavioral reorientation.

An especially useful indicator of gender identity in these boys is the role typically portrayed in fantasy construction. When playing house, these boys are typically mother. If they cannot be mother, they will be school teacher or assume some other feminine role. Our control sample of boys, if they do play house at all, are usually the father or another male. The feminine boys typically refuse to be the father, one boy asserting, "I don't know what a daddy does."

The social relationships of these boys with their peer group are decidedly poor. They are teased, called "sissy" and "queer," and ostracized by males. They relate exceptionally well to girls; girls accept them as novel play companions. They integrate effectively into the female culture, which increases their feminine socialization.

Coupled with the extraordinary degree of feminine role behavior, there is an aversion to culturally typical masculine behavior. There is a decided disinterest in rough-and-tumble play and a decided disinterest in participation in sports.

When these boys draw a person, the figure drawn is typically female. On the draw-a-person test, typical children of this age draw a person of the same

sex as their own. The feminine boys in our sample are more likely to draw a female first, as is typical of the normative female population (Green, Fuller, and Rutley, 1972).

The It-Scale is another test developed by Brown (1956) which also shows sex differences in this age group. "It" is an allegedly neuter cutout which has to make a variety of selections of toys, dress-up things, playmates, and activities. Brown is a male psychologist and so gives you points if the subject picks the masculine choice. Thus, the higher the score, the more masculine the subject. Again our feminine boy sample scores essentially the same as do typical girls (Green, Fuller, and Rutley, 1972).

Toy preference is another good indicator of gender identity. Here the child is placed in a play room and permitted to select culturally typical masculine or feminine toys. We find the feminine boys usually playing with the Barbie doll (as do the girls in our sample) and ignoring the truck. The masculine boys generally select the truck. Significant differences exist between our masculine boy group and our feminine boy group, whereas the control group of girls and the feminine boys score the same (Green, 1973).

An additional investigative procedure provides the children with a set of family dolls with which they are to improvise stories. The amount of time that each particular family member doll is played with is recorded. Again, difference exists between the feminine and the masculine boys, and little difference exists between girls and feminine boys. For the latter two groups there is more preoccupation with female characters in the fantasy construction and considerably more attention to infant care (Green and Fuller, 1973).

While these boys are behaving in the way that an adult male-to-female transsexual recalls childhood behavior, we must be cautious in interpreting this to mean that these children are pretranssexual. They may just as well be prehomosexual, pretransvestitic, or preheterosexual non-transvestitic children. John Money and I have followed some five similarly-behaving boys seen in the late 1950's and early 1960's at Johns Hopkins. Four are homosexual, and one is bisexual. One feminine boy, initially seen just at puberty, did become transsexual, later requesting sex-reassignment surgery.

The focus of today's talk is on the child. Time limitations preclude discussion of their parents in any great detail. Let me, therefore, introduce a few summary comments. Approximately one-third of the feminine boys have been separated from their biological father prior to the fourth birthday. In about half these families there is a father surrogate. Both these figures reveal higher father-son separation than in the random population (1960 census).

Marital role division such as the handling of financial details, leisure-time planning, child discipline and the winner in disagreements so far shows no significant difference between intact families with a feminine boy and matched families with a masculine boy.

Feminine boys seem to prefer their mothers rather than their fathers, while our masculine boy sample, so far, shows a relatively closer relationship to their father. The degree to which mother-son closeness and father-son distancing is child- or parent-activated is under study.

Extensive tape recorded clinical interviewing is under way with interview data being transcribed for coding and rating on several parameters. Additionally, extensive psychological testing of the parents is being conducted, as are situations in which the family interacts as a unit. Regrettably, today's time pressures prevent more detailing of our research program (see Green, 1973).

Much remains to be learned about the relationship between atypical gender role behavior during juvenile years and later gender identity and sexual partner preference. We hope that these family studies will teach us more about the early-life development of both atypical and typical gender identity.

References

1. Green, R. 1973. *Sexual Identity Conflict in Children and Adults.* New York: Basic Books.

2. Green, R., and Fuller, M. 1973. Family Doll Play and Female Identity in Preadolescent Males. *American Journal of Orthopsychiatry* 43: 123-27.

3. Green, R., Fuller, M., and Rutley, B. 1972. It-Scale for Children and Draw-A-Person Test. 30 Feminine vs. 25 Masculine Boys. *Journal of Personality Assessment.* 36: 349-52.

4. Money, J., Hampson, J. G. and Hampson, J. L. 1955. An Examination of Some Basic Sexual Concepts: The Evidence of Human Hermaphroditism. *Bulletin of the Johns Hopkins Hospital* 97: *301-19.*

5. Money, J., Hampson, J. G., and Hampson, J. L. 1957. Imprinting and the Establishment of Gender Role. *Archives of Neurology and Psychiatry* 77: 333-36.

6. Stoller, R. 1968. *Sex and Gender.* New York: Science House.

Discussion: Dr. Green

The question has been raised as to the degree to which male and female infants are held by their mothers in the first three weeks and the first three

months of life. First-born male children have been reported to be held more by their mothers than are females. First-born males' muscles are also reported to be stressed more by their mothers than are those of females. By this is meant the mothers hold boys up by their hands and stress their large muscles. By contrast, there is more vocal imitation of female infants by mothers so that any kind of sound, a gurgle or a gulp, the female baby makes is repeated by the mother (Moss, 1967). It is of interest that we later find higher verbal ability by females on IQ tests, possibly a consequence of their early verbal conditioning.

At UCLA we have had two pairs of monozygotic twins, discordant for gender identity. I use the latter term, rather than transsexualism, because only one of the pairs is adult. The adult pair consists of two females, 21, one of whom is very feminine, while the other desperately wants sex-reassignment surgery. The other twins are eight-year-old boys. One wants to be a girl; the other is content with being a boy (Green and Stoller, 1971).

As far as prenatal hormones are concerned, the closest potential model we have is the concordance occasionally reported between Klinefelter's syndrome and transsexualism (Baker and Stoller, 1968). Here is good evidence that an androgen deficiency began prenatally in a few males who become transsexual.

* * *

I think it is significant to look at some of the positive and some of the negative things which we found in the six-year-old boy study (Yalom, Green and Fisk, 1973). I am going to report on a clinical population of extremely feminine preadolescent boys who might be pretranssexual. These are boys who are obsessed with cross-dressing, female-role-taking, feminine toy preference and who show feminine mannerisms. It was something of a methodological error to try to adapt some of the protocol we were using in the Los Angeles study to the six-year-old subjects in Boston. This is because whatever effects might result from prenatal hormonal treatment, they appear to be too subtle to be picked up by gross testing and interview measures.

In a tape-recorded and blindly-rated interview with the Boston boys' parents, with respect to their son's cross-dressing, female role-taking, doll play, and overt statements of wanting to be a girl, we found no differences in female-hormone exposed six-year-olds and non-hormone exposed boys. On psychological tests like the draw-a-person test and the It-Scale for children, again no differences were found with respect to the female-hormone exposed six-year-olds and the contrast group.

We did go one step further with this study, however, deciding that perhaps the behavioral differences we were looking for are subtle and that parents with only one or two children might not have a broad enough frame of reference with which to detect them. Thus, we went to the schools and asked teachers of the experimental boys to rate them relative to all other boys in

their class on a variety of behavioral parameters. These included items such as assertiveness, aggressivity, and rough-and-tumble play. Here, we found significant differences between the female-hormone and non-hormone boys. The boys whose mothers had received estrogens (and to some degree progesterone) prenatally, were rated by their teachers as less assertive and less athletic. This is a finding which is consistent with those from the 16-year-old groups.

From the neuroendocrine research which Gig Levine touched on, if one were going to find behavioral differences in the human which are logically extrapolatable from nonhuman primate research, one would expect measures like aggressivity and rough-and-tumble play to be those which would be distinguished as a function of prenatal androgen. And, in fact, this is what we see in both the 6- and 16-year-olds.

Probably, the etiology of transsexualism which is the core of this conference's focus, is more complex, and more of an interactional process which may require both a prenatal androgen deficiency as well as a specific social environment during the earliest postnatal years. This social environment could be parental encouragement and reinforcement of feminine behavior. Couple a neuroendocrine androgen deficiency with this special kind of socialization, and then one might obtain the kind of clinical population described here: boys who cross-dress. If we have parents, however, who have no other unusual feature except that their child had an androgen deficiency, then we might not see profound behavioral feminization, e.g., cross-dressing; we would only see less rough-and-tumble, and less assertive play.

Based on animal research one would predict a higher incidence of hypospadias in males exposed prenatally to large doses of estrogen. Indeed among the 40 hormone exposed boys, two were born with hypospadias. That is five percent. The natural incidence in the population is three-tenths of one percent. If nothing else, I think these two cases are a good indication that there was effective delivery of female hormone to the male fetus. This anatomical index is an additional supporting tenet for the thesis that the hormonal effect and the behavioral effect might indeed be interrelated causally, and not just coincidentally.

Bob Stoller (1968) has established a rigid set of criteria of what defines transsexualism. His definition precludes people who are primarily genitally homosexual or fetishistic cross-dressers. Both of these categories are deemed poor operative risks. It is clear that the group of patients being operated on in the United States at this time includes many patients whom Stoller would classify as homosexual or transvestitic. I am wondering if any of the clinical programs represented here have an idea, to date, as to whether Stoller's harbingers of poor outcome for "nonpure" transsexuals is being validated?

References

1. Baker, M. and Stoller, R. 1968. Can a Biological Force Contribute to Gender Identity? *American Journal of Psychiatry* 124: 1653-68.

2. Green, R. and Stoller, R. 1971. Two Pairs of Monozygotic (Identical) Twins Discordant for Gender Identity. *Archives of Sexual Behavior* 1: 321-28.

3. Moss, H. 1967. Sex, Age and State as Determinants of Mother-Infant Interaction. *Merrill-Palmer Quarterly 13: 19-36.*

4. Stoller, R. 1968. *Sex and Gender.* New-York, Science House.

5. Yalom, I., Green, R., and Fisk, 1973. Prenatal Exposure to Female Hormones: Effect on Psychosexual Development in Boys. *Archives of General Psychiatry* 28: 554-61.

The Etiology of Transsexualism.

Anke A. Ehrhardt, Ph.D.

We are really talking about a wide range of different kinds of behaviors and different kinds of people. The only thing that transsexuals have in common is that they want to change their sex and have hormonal and surgical sex reassignment treatment.

When it comes to the question of etiology, namely of why a person may develop such a strong desire to change his or her sex, it seems to me that we have to be very open-minded and look into all directions to find possible leads of explanations of the phenomenon.

The first lead which should be considered is the psychodynamic theory which was developed by Stoller (1968) at UCLA. It basically says that the male transsexual often has a history of a peculiar relationship with his mother. His mother is described as an overprotective woman with whom the patient has an intimate physical closeness far beyond the usual time of physical intimacy between mother and child. The mother is described as a woman who is herself confused and unhappy about her gender identity as a female. If this theory has any validity and Stoller has documented it with various cases, then other people should find the same kind of history in transsexuals. Very few do. This does not mean that the theory is not valid. It only means that it may explain *some* behavioral aspects of *some* transsexuals. The theory is also one which addresses itself and is documented to a large degree only for the male transsexual. The specific aspects of the etiology of female transsexualism are not separately and independently validated.

The second area of research which may produce explanations for etiologic factors, is endocrine function of the adult patient. Again and again, reports are published on transsexuals who do not show the complete picture of male and female secondary sex characteristics after they have gone through

puberty (see review in Benjamin, 1966). Over the last two years, several research reports have been published suggesting that male and female homosexuals are different in testosterone and estrogen levels (Kolodny, et al., 1971; Loraine, 1972) from normal control males and females. Concerning transsexuals, however, the few studies which have been conducted have not shown any differences from controls. We heard during this meeting that Dr. Jones has found no differences between normal women and female transsexuals in his endocrine measurements. And in an earlier study by Migeon and coworkers, no differences were found between normal men and male transsexuals in sex hormone measurements (Migeon, et al., 1968). However, again, even if no differences have been found yet, we should not lightly discard the possibility that future studies, with finer techniques and different measurements, may point to a peculiar endocrine pattern in transsexual patients. Such findings would suggest that abnormal endocrine function may be one factor which contributes to transsexual development.

The third area of research which may produce etiologic explanations for the transsexual phenomenon is the field of prenatal hormones and their influence on CNS differentiation with a postnatal effect on gender identity. This area of research has become of special interest over the last twenty years, first in animal experimental studies and subsequently in human analogues (see review in Money & Ehrhardt, 1972). In our own work, one of the clinical groups we have studied is genetic females with the adrenogenital syndrome. These are girls with a known history of exposure to high androgen levels in fetal life, inducing masculinization to varying degrees of their external genitalia. The question we have been asking in our earlier studies with John Money and in our present work with Susan W. Baker has been: Are these females in any way different from normal females concerning female sex-related behavior in childhood and adolescence? To examine this question, we have systematically evaluated genetic females with the adrenogenital syndrome (early-treated with cortisone and early genitally corrected with plastic surgery) at Johns Hopkins, in comparison to a matched control group of normal girls (Ehrhardt, Epstein & Money, 1968) and in Buffalo in comparison with their unaffected female siblings (Ehrhardt & Baker, 1973).

The main results in both series of studies on independent clinical samples can be summarized as follows:

1. Fetally androgenized genetic females show a cluster of behavioral traits, significantly different from either normal or sibling control group, commonly classified as tomboyism. They are reported by their mothers and themselves to have a high level of physical energy in outdoor play and sports activities (rough-and-tumble play); they frequently prefer boys over girls if they have a choice in playmates; and they are typically identified as tomboys on a long-term basis during childhood.

2. Fetally androgenized genetic females have a limited amount (significantly less compared to matched or sibling controls) of play rehearsal of the wife and mother role. They rarely play with dolls, but often prefer boys' over girls' toys; they have a low interest in bride and marriage games; they have a low interest (or none) in becoming a mother; and they have very little interest in infant care as in babysitting and handling of babies.
3. Fetally androgenized genetic females have very little interest in their appearance (significantly less than either control group). They are often not interested in feminine clothing, jewelry, hairdo and make-up.
4. Fetally androgenized genetic females generally do not have a problem of identifying as females and of establishing a female gender identity. Their behavior differences and modifications are within the normal range of acceptable female behavior; some of the girls admitted freely that it may have been fun being a boy rather than a girl. However, it did not cause any conflict comparable to the problem in gender identity described by female transsexuals.

The behavior manifestations in childhood of adolescent girls with the adrenogenital syndrome are strikingly similar to the histories of female transsexuals, so the hypothesis that fetal hormonal masculinization is one of the etiologic factors in transsexualism is a very plausible one. However, one must be careful not to oversimplify matters. Fetally androgenized females and female transsexuals have a very similar childhood history of behavior development. Female transsexuals, though, want to change their sex, and girls with adrenogenital syndrome (early-treated and consistently raised as girls) rarely do. *Behavior,* thus, is similar, but not *gender identity differentiation.* Girls with the adrenogenital syndrome can incorporate all their tomboyish traits into a female sense of gender identity; female transsexuals cannot.

Thus, the findings on the studies of prenatal hormonal influences on postnatal behavior may be a lead to another factor contributing to behavior development in transsexuals, but they do not suggest that prenatal hormones determine the gender identity conflict in transsexuals.

To summarize my comments on the etiology of transsexualism, we have to conclude that at this time, the causes of transsexualism are unknown. The best guess at the present time is that the answer will be in a multitude of factors—partly prenatal, partly postnatal—in interaction with each other and with different emphases and importance for different patients. At this stage, we have to be open-minded and inquisitive about any clue which may explain the development of any aspect of the transsexual phenomenon.

References

Benjamin, The Transsexual Phenomenon. New York: The Julian Press, Inc.

Publishers, 1966.

Ehrhardt, A. A. and Baker, S. W. Horman aberrations and the implications for the understanding of normal sex differentiation. Paper presented at the Society for Research in Child Development. Philadelphia: March 29-April 1, 1973.

Ehrhardt, A. A., Epstein, R. and Money, J. Fetal androgens and female gender identity in the early-treated adrenogenital syndrome. *The Johns Hopkins Medical Journal,* 122: 160-167, 1968.

Kolodny, R. C., Masters, W. H., Hendryx, J., and Toro, G. Plasma testosterone and semen analysis in male homosexuals. New England Journal of *Medicine,* 285: 1170-1174, 1971.

Loraine, J. Hormones and homosexuality. *New Scientist,* 53: 270-271, 1972.

Migeon, C. J., Rivarola, M. A. and Forest, M. G. Studies of androgens in transsexual subjects. Effects of estrogen therapy. *The Johns Hopkins Medical Journal,* 123: 128-133, 1968.

Money, J. and Ehrhardt, A. A. *Man and Woman, Boy and Girl: The Differentiation and Dimorphism of Gender Identity from Conception to Maturity.* Baltimore, The Johns Hopkins Press, 1972.

Stoller, R. J. *Sex and Gender. On the Development of Masculinity and Femininity.* New York, Science House, 1968.

Discussion: Dr. Ehrhardt

I have the impression that we are getting a different type of patient, since transsexualism has been so widely publicized. Patients who have a variety of gender identity disorders knock now at our doors and say, "I am a transsexual: please help me with hormones and surgery." A careful evaluation often reveals that this is a patient who does not fit the classical picture of transsexualism at all, but may be a homosexual unable to accept his homosexuality. This kind of patient needs a different kind of treatment than the typical transsexual. He may need counseling and therapy to accept his problem and live with it as comfortably as possible. Hormones and surgery may be the wrong treatment approach and, in fact, detrimental to this patient. If we do not discourage these types of patients from sex reassignment procedures, they will be the ones who regret afterwards—and too late—that they have gone through the change. On

the other hand, patients who do not fit the usual transsexual picture, cannot simply be turned away. They need help, but a different kind of help, than the transsexual who seems to benefit from hormones and surgery.

Female Transsexualism

Ira B. Pauly, M.D.

Something very healthy is happening when you get plastic surgeons asking questions about family dynamics and psychiatrists asking questions about surgical repair of the perineum. Truly it represents a refreshing and rather interdisciplinary approach to this mutual concern of gender role misidentification.

I think we are in debt and owe our gratitude to the transsexual who has made all of this research possible. There has been some comment about the transsexual being difficult to deal with, manipulative, exploitative, hysterical, etc. Let me just remind you that the exploitation and manipulation can be a characteristic of the researcher as well. What we need to be concerned about is the manipulation that we, the professional, may be involved in. We too can be exploitative. We can be more concerned about collecting our data, doing our pilot studies, publishing our articles, contributing to research, and I suppose, increasing the money in our pockets.

I would like to underscore that the transsexual, by giving of himself or herself freely, has enabled us to study a neglected area, namely that of gender identity. I am concerned at this point that with these pilot studies the service that should be available to these people who need help seems to be coming to an abrupt end, because we are collecting our data and running home to study it. I am very refreshed by the Stanford approach, which seems to have the service component as primary and research component as secondary.

My view comes primarily from a review of the literature, and secondarily from clinical contact with several male and female transsexuals. I studied the male side of the coin and published the results in 1965. The first case of female transsexualism was published in 1922 in Germany, by Hirschfield. I stopped in 1970, after having collected eighty cases. In 1964, after three years, I had been

able to collect 100 cases of male to female. It took me 11 or 12 years to collect 80 cases of female to male.

There were 39 case reports; 30 of them were individual cases and nine were of two or more cases. The majority came from the United States, then France, Germany, Switzerland, etc.

I think that the time has come where individual, anecdotal reporting is no longer necessary. What we now need is a series of well-studied cases with long-term follow-up. I will review the data which are already available in terms of published cases and series of cases of transsexualism of the female to male type. The first source of information comes from Christian Hamburger, after the report of his famous case of Christine Jorgensen from the "letters from the world" in 1953. What we are interested in here is the male to female ratio of transsexualism, 3.3:1. As shown in Table 1, the figures range from a high of 8.6:1, male to female predominance, in Benjamin's 1967 study to as low as 2.3:1 in Walinder's series from Sweden. Dr. Ihlenfeld's more recent comments indicate that Benjamin's 8.6:1 ratio is now down to about 4:1 if you refer to those cases obtaining sex reassignment surgery. Walinder and I, from two places as different as Sweden and Oregon, are now at about a 1:1 ratio for male to female patients. This may be spurious because it has become known in Oregon that we are doing the operation on the female so we are getting the female transsexual coming to us. I suspect that the previous high ratio of male to female is simply a reflection of the fact that there was more known about the male to female operation. Male to female sex reassignment is more publicized, and undoubtedly this accounts for the fact that more male transsexuals have come to our attention than female transsexuals. I am not sure that the ratio will come down to a 1:1 ratio. The male to female ratio is about 2:1 at the present time.

Related to this ratio is socioeconomic class. Using the Hollingshead seven-point scale, with one being the highest socioeconomic class and seven being the lowest, you can see a high loading of transsexuals in the lower socioeconomic classes. This is related to the fact that there is a much higher incidence of female to male transsexualism in people raised in rural as compared to urban areas.

Figure 1 is a graphic presentation of the modal sequence in the female transsexual life history. At the bottom you have a preference for the male role, which is acknowledged as beginning from a range of three to thirteen years. The mean age is seven years. Most of these people say that they preferred the role of the little boy from "as long as I can remember." Where there are data on specific age of onset, the range is indicated by the horizontal line and a square in the middle represents the mean. What we see is not a single real case but a composite, modal case in the life sequence of female transsexualism. We are aware of the early manifestations of the preference of the little boy: the

cross-dressing, the rough and tumble play, the toughest kid on the block attitude, the great delight in being the ruffian of the neighborhood, often achieved with considerable success. In brief, the role of the tomboy. Going quickly through this sequence, the next milestone is menarche, a very painful time for these little girls who are now confronted with the physical female reality of their body. To their great shame and abhorrence they develop breasts at this time. John Money likened this revulsion toward breasts in the female transsexual to the abhorrence of the protruding penis in the male to female transsexual.

Next along the way is the inevitable attraction for other females, most commonly referred to as homosexual object choice preference. With all the problems that we have just heard about labeling, I will try to avoid the term as much as I can. However, the female transsexual herself accepts this attraction as a homosexual one, and usually deals with it by a flight into heterosexuality. Most of them have some heterosexual experience as a means of dealing with same sexed object preference. There is a lag of some five years from the awareness of attraction to females to actual contact with other females. It is not too long after contact with female partners that they begin passing and living in society as males and are usually very well accepted in that role.

There is a five or six year gap, between this passing and the time they come in and request the change of sex operation. The lag is shorter now because of the increased availability of the procedure, and the fact that it is more well-known. We are seeing people who come in at a much earlier age than 25 years; they may be coming in as early as the age of 15 or 20, when their passing has either just begun or possibly not yet begun. Up until now, the physicians involved are dealing with a fait accompli, in the sense that these individuals have been living as males for a number of years. This rehabilitation, which has been discussed, is a misnomer in the sense that most of them do not need rehabilitation. In most cases, they are already fixed in the cross-gender role. As time goes on, we probably will be seeing earlier cases, in which this passing in the male role has not been as long established.

The next point in the sequence is the removal of the breasts, the most hated organs. Later a hysterectomy is performed. This time lag is also changing because these two procedures are now being done in one stage, and the time lag will no longer exist as it has historically.

All of these female transsexuals have homosexual experience or at least an attraction for other females. (Figure 1). Seeing themselves as men, they consider these relationships heterosexual. What they are saying is that they are heterogenderal. However, 57 percent of these female transsexuals have at least dated men, and smaller percentages of them have had intercourse with men or married men, and 16 percent have had children. If there is any question about the biological abnormality, these data answer it.

In terms of the biological data, I can summarize them by saying that the female transsexual is biologically normal (Figure 2). They are also normal genetically. In 100 percent of the patients, the softer data indicate that the 17 ketosteroid levels span a range that is normal for females although this is hard to determine because some of these female transsexuals are probably on exogenous androgens. Walinder has pointed out that the most significant abnormality, from the biological point of view, is the abnormal electro-encephalogram which becomes fascinating in view of Dr. Levine's discussion about neural tracts and the neural wiring involved.

We have some information about psychopathology in these people (Table 4). Depression is most common. By history a large percentage of these people report fairly serious depressions; on examination, however, they are not quite that depressed. Seventeen percent have actually made a suicide attempt. Postoperatively, I have seen no reports of female to male transsexuals having made a suicide attempt.

Discussion: Dr. Pauly

What concerns me is the general dissatisfaction with the body. I am less concerned with small stature because there is a spectrum of size among us all. There are tall women and short men. One thing we are working on, only as a pilot study, is a body image scale. When all the parts of the body are listed on a five point scale from very satisfactory to very unsatisfactory, we arrive at an objective score. If the score is above 3.0, which is the neutral point on the scale, and there is a general gross dissatisfaction with many of the parts of the body, then you tend to find the type of patient you mentioned earlier, where you were asked to do some plastic repair on the ankles, hips, and legs, forehead and eyebrows. This, I am sure, would be of great concern to the surgeon who would want to know about it in a fairly objective way ahead of time. Psychiatrists are often aware of this pan-surgical patient and have been required to deal with this type of individual on a separate basis. Therefore, I think we might introduce something that would be of help to the surgeons. This is precisely why this venture should be an interdisciplinary one, with professionals of different expertise working together.

* * *

The male to female transsexuals show more gross dissatisfaction with all parts of their body. We are experimenting with a body image scale, which asks the individual to rate the various parts of his anatomy on a 5 point scale, from very satisfied to very dissatisfied. Thus, the higher the score is the greater the dissatisfaction. Male transsexuals have a mean score of over three indicating considerable dissatisfaction. The female to male transsexuals have a mean score of about 2.3. So they are generally more satisfied with their bodies except, of course, for the breasts, ovaries, and uterus which are the main sources of dissatisfaction.

PUBLISHED CASES OF TRANSSEXUALISM

	Author	Year	Source	Male	Female	Male-Female Ratio
1.	Hamburger	1953	Letters from world	357	100	3.5:1
2.	Overzier	1956	Cases for Germany	19	4	4.8:1
3.	Randell	1959	Cases from England	29	6	4.8:1
4.	Pauly	1965	Review of world literature	100	28	3.6:1
5.	Benjamin	1967	Cases from the U.S.	242	28	8.6:1
6.	Wallinder	1967	Cases from Sweden	30	13	2.3:1
7.	Hoopes, et al.	1968	Letter from world	290	78	3.8:1
8.	Edgerton	1970	Operated at Johns Hopkins	20	4	5:1
9.	Fogh-Andersen	1970	Operated in Denmark	11	3	3.7:1
10.	Hoenig, et al.	1970	Cases from England	46	14	3.3:1
			Total	1148	286	4.0:1

Table 1. Published Cases of Transsexualism

SOCIO-ECONOMIC STATUS OF FAMILIES OF FEMALE TRANSSEXUALS

Position*		Percent	Number
1.	Executives and professionals	8	3
2.	Managers and lesser professionals	13	5
3.	Administrative personnel and businessmen	3	1
4.	Clerical and sales workers	15	6
5.	Skilled workers	13	5
6.	Semi-skilled workers	23	9
7.	Unskilled workers	25	10
	Total	100	39

* Seven position socio-economic scale of Hollingshead, determined by occupation of the father

Table 2. Socio-economic Status of Families of Female Transsexuals.

SEXUAL CHARACTERISTICS OF FEMALE TRANSSEXUALS

Homosexual Experience	Percent Positive	Number
Sexual attraction for females	100	76
Relationship considered "heterosexual"	100	59
Overt sexual contact with females	86	71
Stable relationship with female partner	76	51
Avoids being sexually stimulated	57	30
Strength of homosexual drive		62
strong	24	15
moderate	34	21
minimal	32	20
absent	10	6
Heterosexual Experience		
Dated men	57	47
Intercourse with men	48	53
Married to men	19	54
Had children	16	49

Table 3. Sexual Characteristics of Female Transsexuals.

DEPRESSION IN FEMALE TRANSSEXUALS

	By History		On Examination	
	Percent	Number	Percent	Number
None	--	--	31	11
Mild	16	7	33	12
Moderate	22	10	22	8
Severe	62	28	14	5

56% (n=25) of female transsexuals state they have made suicide attempts.

Table 4. Depression in Female Transsexuals.

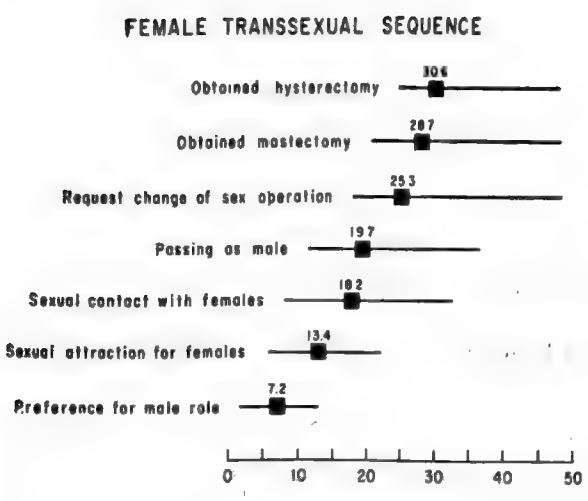


Figure 1. Female Transsexual Sequence.

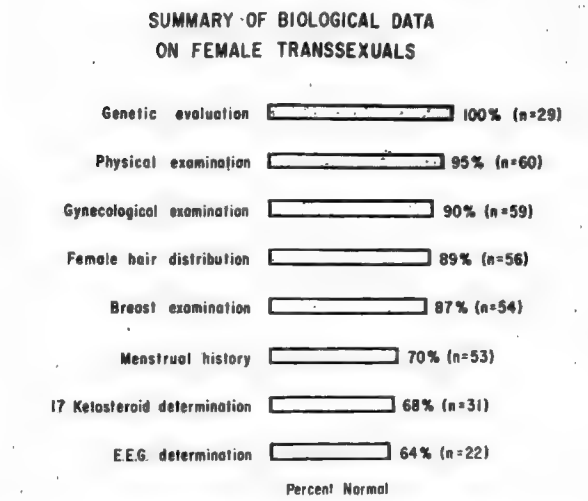


Figure 2. Summary of Biological Data on Female Transsexuals.

Sex Differences in the Brain: Experimental Evidence

Seymour Levine, Ph.D.

I would like to report on a large body of research information concerning the determinants of gender in a biological sense. I want to discuss the differentiation of neural mechanisms which regulate and control the various secretions of gonadotropins in the pituitary, which regulates both gonadal and ovarian function. Sexual differentiation in behavior has been demonstrated to be sexually dimorphic and appears to be clearly different with regard to the neural wiring which controls these behaviors and the hormonal interactions which modulate these sexually dimorphic behavioral characteristics.

The basic hypothesis states that in the mammalian species the predominant primordial sex is female and that in order for maleness to occur, a sequence of additive events has to be present. If, at any point in the process of sexual differentiation, any one of these processes is in some way physiologically altered or pathologically changed, the member of the species will then go on to be, as far as the central nervous system and the phenotype is concerned, predominantly female.

The events necessary for determining maleness start almost in the beginning of embryonic development. The earliest process in sexual differentiation is the differentiation of the genital ridge into either a testis or into an ovary. The process occurs early in embryonic life. If, for some reason, a testis is not formed, the system remains predominantly female. It is interesting, if one examines the development, prenatally, of the fetal gonads, what is seen is early development of the testes. In fact, the observation is that gonadal tissue is an ovary, not because it is clearly defined histologically or morphologically as an ovary, but only because it is not histologically and morphologically a testis. The embryonic ovary, unlike the embryonic testis, does not have any of

the morphological characteristics of ovarian tissue. The development of testicular tissue in terms of clear definition of Leydig's cells and all the morphology that is related to testicular tissue, is clearly present long before any ovarian tissue is recognizable as ovary.

The next process of sexual differentiation is the development of the sexually dimorphic internal genitalia, such as the Wolffian duct, the seminal vesicle, the prostate, and the formation of penile tissue which are now occurring as a consequence of the secretion of the fetally formed testicular tissue. It is not clear whether these secretions of the testes are androgenic. Jost has described them as "duct organizing substances." If for any reason the functions of the fetal testes are blocked, the result will be that all the internal genitalia will be predominantly morphologically female. In a chromosomal male with developed testes, it is still possible that the system will continue to develop predominantly as a female if these testes are unable to function on the developing internal genitalia.

The next step in sexual differentiation is related to the sexual differentiation of the central nervous system. It is now known that the regulation of gonadotropin secretion which regulates the ovulatory cycle and which further controls secretions of androgen and spermatogenesis is predominantly neurally regulated. The neural regulation was clearly demonstrated in a classic experiment by the late Professor Geoffrey Harris and Dora Jacobsohn. These investigators removed the pituitary of males and transplanted these pituitaries to adult females. Normal female function remained intact. They then did the converse, by removing the pituitaries of females and transplanting them into normal adult males and normal male function was observed. Thus it appears that all the regulatory action of the pituitary is a function of the regulation superimposed upon the pituitary by the central nervous system.

What has been demonstrated is that it is possible in the rat to alter the sexually dimorphic gonadotropin regulation by significantly altering the hormonal status of the fetal and developing organism. Interestingly enough, it is significantly easier to reverse the male to female pattern than it is to reverse the female to male.

An experimental model of biological gender role reversal involves the following manipulations. In the newborn male rat between 12 and 24 hours of age the testes are surgically removed. Following surgical removal of testes, one of two procedures is initiated: either an injection of a placebo compound, such as oil, is given or an injection of testosterone, is administered to the newborn animal to attempt to reverse the effects of castration. The initial consequence of removal of the testes without any testosterone replacement is that an XY male with normal or almost normal internal male genitalia can be shown to maintain female cyclic ovulation. This is accomplished by removing an ovary

from an immature female which has never ovulated and transplanting it into the adult male that has been castrated neonatally. These experiments are probably the most dramatic experiments that I have ever observed.

On the 11th or 12th day following transplantation of an ovary which has never had a population of corpora lutea corpora lutea are clearly demonstrable. Skilled surgical techniques can also allow for the transplantation of vaginal tissue to the abdominal surface of the male. This permits the examination of vaginal smears. The vaginal smears of the male that has been castrated in infancy, following the transplantation of an ovary, are indistinguishable from those of female cycles. A single injection of testosterone at the critical period in development following castration will reverse all of the processes described above and those which I am about to describe.

Sex behavior is clearly different between the male and female of the rodent species. The male is sexually active at all times, and the female is restricted in her sexual behavior to those periods of time during the ovulatory cycle when ovulation is about to occur. If one takes a normal adult male and removes the testes, no matter how much estrogen and progesterone is administered to this male, it is difficult to get this male to show a normal pattern of lordosis. In contrast, the male that has been castrated as an infant and has had an ovary transplant will demonstrate female sexual behavior at those times which are correspondent to the times that the ovary appears to be ovulating. The sexual behavior of the neonatal castrate male, either with an ovarian transplant or given very small injections of estrogen and progesterone, is indistinguishable from that of a normal female. It has also been demonstrated that other sexually dimorphic behaviors are consistent with patterns of sexual differentiation. Activity levels which are clearly different between the male and female can be reserved so that the neonatal castrate shows activity levels that are identical to that of the female. The question remains of the applicability of these results to humans.

Discussion: Dr. Levine

The neural regulation of gonadotropins indicates that there are particular areas in the brain, i.e., the hypothalamic and limbic system areas, which are very intimately related to gonadotropin secretion. The isolation of releasing factors or releasing hormones, as Schally calls them, from the hypothalamus also indicates the implications of the central nervous system in the regulation of patterns of gonadotropins. The evidence is clear that in mammalian species the central nervous system is the predominant regulator of almost all endocrine function, particularly those which are related to anterior pituitary function.

I do not like to limit gonadotropin secretion exclusively to the hypothalamus and limbic system because there is not sufficient evidence. There

are many aspects of the limbic system, but they all have one uniform characteristic—they all have collaterals in the hypothalamus. There is very good evidence that if one isolates the hypothalamus from its afferents and produces a hypothalamic island, one does not get cyclic ovulation. Clearly, there are other aspects of the central nervous system modulating the hypothalamus in relationship to producing normal cyclicity in patterns of gonadotropin secretion.

* * *

One can create acyclic gonadotropin regulation in the female by giving large doses of estrogen or large doses of androgen. But the basic cyclic or acyclic potential is a function of the early hormonal environment. Once one passes the critical period, it is exceedingly difficult to reverse. Doses of androgen were given postnatally to females which produced acyclicity. Again it is not that the ovary is acyclic. The ovary in this female will show the cyclicity of a normal female, but the central nervous system will not produce a cyclic pattern of gonadotropins once it has been exposed to large doses of androgen in infancy.

* * *

In the Harlow monkey the tremendous behavioral deficits are invariably much greater in the male than in the female. These are deficits in sex behavior and in emotional reactivity. We have evidence in our laboratory of various early influences on behavior that shows the male is much more susceptible to these influences. One can almost totally feminize a male by neonatal castration. One can do it even more severely if it is done prenatally.

It is extremely difficult to totally masculinize a female by giving her androgens. I have never seen a case which produced a complete gender reversal in the female fetus or neonate as can be produced in the male. This is striking throughout all of our studies. The ovaries appear to play remarkably little role during development. If the ovaries are taken out of the neonatal female and replaced in the adult, she will cycle like a perfectly normal female. There is no evidence that those ovaries are playing any role in sexual differentiation.

* * *

I have come to the conclusion that the nature-nurture question is a nonquestion. It is a nonquestion in the sense that they are almost totally and thoroughly inseparable. From the moment of conception the organism is in an environment. An organism without an environment is not an organism. The infant female rat emits a different ultrasonic sound than the male and the mother treats the males and females differently. In the chimp what one sees is the mother actually picking the young up and examining its genitalia. This is not seen in other primates. Differences in length of time that it takes to leave the mother are clearly different in male and female primates. The implication is that there is something different to begin with which releases a different set of

responses on the part of the mother.

* * *

If one took a normal adult male rat and gave it some dose of estrogen, a lordotic response would be elicited.

* * *

With a dose of about 5000 fold, one can induce a partial lordosis in about 20 percent of males. Hormones are nothing unless they are acting on a receptor site. It looks as though one of the differences in sexual differentiation is the way in which the receptor site responds to these hormones. We did a study where we took the penis of male rats. The penis of male rats, if you look at it morphologically, has spines on it. These spines are related to the ejaculatory response. The spines are sensitive to androgen. If we remove androgen in adulthood, what happens is that these spines atrophy to the extent that one cannot see them. We could simply put them under a microscope and count them.

In this experiment we castrated a group of neonatal male rats, exposed some to testosterone, and others to nothing. Then we waited until they were well into adulthood before looking at their penises. Since they had no androgen, no spines were present. When we gave these animals androgen, we found that those that had been exposed to testosterone in infancy showed a perfectly normal response to the androgen, but those that had not been exposed showed no response.

* * *

When the females reach adulthood, they ovulate and menstruate, but as yet, we have no data on their sexual behavior. There is no evidence that in adulthood they pursue this masculine pattern.

* * *

Rhesus monkeys do menstruate, they do ovulate, and apparently they do appear to be normally receptive. They look very much like the androgenized females.

* * *

Goy talks about masculine tendencies to rough and tumble behavior. It is more likely that they are more tomboyish in effect. We can show this in many instances of androgenized rats. We can show many aspects of male behavior, but we can also show many aspects that are feminine. We do not completely reverse—we get a very mixed bag.

Plasma Testosterone Concentration in Female Transsexuals

James R. Jones, M.D.

This report is primarily concerned with female transsexualism, that is, females converting to males. The study was carried out in conjunction with the Clinical Research Center at the Downstate Medical Center in Brooklyn and supported in part by an NIH grant.

Plasma testosterone determinations provide a fairly good index of androgenicity in the female. Elevated levels of plasma testosterone have been observed in such disorders as polycystic ovary syndrome (Sein Levinthal syndrome) and congenital adrenal hyperplasia. It has also been observed in patients with functional arrhenoblastomas. The high levels of circulating testosterone found in patients with testicular feminization were certainly the most important step in determining the concept of "end organ failure" and opening up this particular syndrome of male pseudohermaphroditism .

Our report will deal primarily with plasma testosterone, but we will again explain some of the other endocrinological parameters that we have studied. The control subjects consisted of 22 normally menstruating female student nurses in whom there was no evidence of clinical alteration of adrenal or ovarian function. The male subjects were primarily laboratory workers. Plasma testosterone concentrations and those for gonadotropins were drawn between 8 and 9 a.m. In the normal male this is of some importance, since there may be circadian rhythm of plasma testosterone in the normal male. Ovarian vein plasma samples were obtained from two subjects, ages 26 and 28 years (the age of hysterectomy for carcinoma *in situ*). They described no discernible gynecological endocrinopathy at the time.

There were 12 female transsexual patients studied on the Gender Identity Service at the State University of New York. Control plasma testosterone and urinary steroid excretion rates in all patients were carried out. These were carried out both as controls, as well as before, during, and after

adrenal and ovarian suppression tests.

Ovarian vein plasma was obtained from one of the female transsexual patients at the time of hysterectomy and bilateral salpingo-oophorectomy as the first stage of surgical sex conversion. All female transsexual patients had been receiving testosterone 200 m.g., i.m. every two weeks for one to three years prior to the study. All medication, however, had been stopped on these patients approximately eight to 12 weeks prior to the institution of the study. The plasma testosterone was determined by two methods in our laboratory, one using gas liquid chromatography, the other using primarily radio-immune assay.

Twenty-four hour urinary excretion of 17 ketosteroids was performed by the method of Dreckta and that of the ketogenics by the method of Fu.

Results

In the normal female patients, the mean plasma testosterone concentration was 0.02 micrograms/100 ml of plasma. In the normal males, the mean concentration of plasma testosterone was 0.56 micrograms/100 ml. These were two clearly discernible populations.

In female transsexuals, the baseline plasma testosterone concentration and urinary steroid excretion rates (as determined in the 12 transsexual patients) were perfectly normal for normal females, with two exceptions. All of the data were statistically evaluated, indicating no alteration in plasma testosterone that was discernible on a mean level between normal females and female transsexuals.

Ten of the 12 patients had no significant elevation in plasma testosterone during ovarian and adrenal stimulation. ACTH stimulation elicited a small rise which is perfectly consistent with what we know of adrenal function. Dexamethasone showed a perfectly normal suppression. The giving of human chorionic gonadotropins along with dexamethasone produced a slight rise in circulating plasma testosterone, again entirely consistent with normal females. "Dex + E" (dexamethasone + estrogen) again showed a perfectly normal suppression pattern for a normal female. All of the urinary steroid excretion levels were perfectly fine.

Two of the female transsexual patients, however, did show what we considered to be a significant elevation in plasma testosterone, 0.06 mg/100 ml in the controls. The primary source of testosterone in these two patients was the ovary (at least if human chorionic gonadotropin is any indication of that). So in two patients out of the 12, there were baseline elevations of plasma testosterone. However, I think that these are explicable on the basis of the previous intake of testosterone. Both of these patients, one of whom did come to surgery, had clearly definable polycystic ovary syndrome. This may provide

a little insight into the evolution of the polycystic ovary syndrome. Small doses of androgens over a long period of time have been implicated in the development of polycystic ovary.

All of the urinary excretion studies were perfectly normal. In addition, all 12 patients were subjected to analysis of plasma gonadotropins as determined by radio-immune assay, separated as FSH and LH. This becomes an extremely complicated dissertation and study when we are comparing levels of gonadotropins at a specific point in time. Rather than go into infinite detail on the analysis, it can be said that if the patient discontinued the testosterone and resumed cyclic menstruation, her gonadotropin levels were perfectly consistent with that of a normal female. In the two patients who did not ovulate after cessation of therapy, the acyclic pattern was entirely normal.

In addition to the gonadotropins, leukocytic karyotyping was carried out on all patients. In all incidences, 46 XX was the finding. We became uncomfortable with this halfway through and decided to karyotype numerous tissues. Of the 12 patients, seven had further typing of skin and ovarian tissue, all of which indicated 46 XX.

Finally in one of the female transsexual patients who came to surgery, ovarian vein effluent was analyzed for plasma testosterone. From this type of analysis, one can determine the testosterone production rate in this patient.

Ovarian vein production rates measured directly in terms of plasma testosterone in female transsexual patients showed no abnormality in testosterone secretion, indicating that the production rate at the ovarian level was perfectly normal.

The last parameter is a rather difficult one to assess. This is the measurement of sebum secretion, the oil on the skin, which is directly testosterone dependent. The sebum secretion rate in the female transsexual was equivalent to that of the perfectly normal male with perfectly normal androgen secretion.

Obviously, we have covered a fair amount of ground. We have measured plasma testosterone, urinary steroid excretion rates, plasma gonadotropins, sebum ovarian vein plasma testosterone, and karyotyping. However, this is by no means the conclusion of the endrocrinologic investigation of transsexualism on any level. Obviously, investigation of polypeptides, intracellular carrier proteins and even intracellular brain tissue reactivity to various steroid hormones, should be carried out.

III Establishing a Gender Identity Program

Philosophy and Problems in Establishing a Gender (and Sex) Program

Joel Fort, M.D.

I am speaking now as a staff member and leader of the Sex and Gender Program of the National Center for Solving Special Social and Health Problems, Fort Help in San Francisco, a private, non-profit and widely utilized program. In establishing a sex and gender program, the first problems I encountered, historically, were of a political and professional nature. In late 1965 and early 1966 I created a program for transsexuals within the San Francisco Health Department as part of the first public treatment program for those with heterosexual, homosexual, and transsexual problems. The professional problem at that time was resistance from the medical, nursing, and social service staff of that program to the concept of working with transsexuals. They were then defined as a deviant group, strange and unfamiliar to internist, psychiatrist, and social worker, and thus to be shunned.

Secondly, there was a problem of a political or bureaucratic nature. Most of us work in complex bureaucracies and face institutional pollution with its crises of mediocrity, senility, amorality, and dehumanization. The program for transsexuals was built into a city government agency and was one of a number of innovations felt to be too rapid, too ahead of its time, that brought about a confrontation with city officialdom. The main cooperation in setting up the program came from a San Francisco police officer in that department's community relations program. Additionally, we were aided by early consultation from one of the great pioneers in human sexuality, Dr. Harry Benjamin.

The third problem in treating or rehabilitating transsexuals was (and is) criminalization. Throughout our society, one responds to the unusual or different by criminalization. In America, sex is basically illegal. There are very

few sexual acts that are legally acceptable. As a part of this attempt to coerce morality and virtue, we make it a criminal offense to engage in a variety of natural and common sexual acts, and this affects the transsexual as well as the heterosexual and homosexual.

Another common and generally detrimental response is to label transsexuals as sick. With a forced choice between being a criminal and being sick, in most instances, it is better to be "sick." Obviously we should have more choices for people.

The sickness concept is built into the medical-psychiatric model. To most physicians, it is heresy to question the concept that a person seeking help must be responded to as a patient. It is possible, however, to move beyond both the criminalization and sickness models. It is possible also to move beyond the idea that working with sex and gender problems is necessarily the purview of the psychiatrist.

The fourth problem is the hostility, pettiness, and uncooperativeness of many transsexuals as people seeking help or, when an attempt is made to bring them into the helping team, as colleagues. I have attempted a number of such experiments over the years, comparable to blending a former alcoholic or heroin addict into a treatment team, and it presents considerable problems for a variety of reasons. One such problem is where the transsexual claims a feminine identity or even seeks a conversion operation, yet maintains a masculine voice and masculine appearance, including dress, and refuses to see their relationship to his ultimate goal.

The question of what is rehabilitation is also a problem. Rehabilitation has to be defined within some frame of reference. What is the goal toward which you are attempting to move a person? Hopefully, it is a goal you will allow them to define for themselves rather than impose on them, as, for example, allowing a homosexual or transsexual to be themselves rather than seeking to convert them to heterosexuality.

With the growing popularity and acceptance of transsexualism, still another problem is that some homosexuals prefer the label of transsexual, just as some alcoholics favor a physical cause or explanation for their illness so they do not have to deal with social and psychological factors.

Sex and gender should be seen as a continuum, with all of us having some elements of male and female gender or sex, with different emphases or expressions of them. Transsexuals should not be segregated from other sex or gender problems. The best treatment or helping program is one such as our Sex and Gender Program; eclectic and comprehensive, including in it group and individual counseling; self-help and psychotherapy; male or female hormones; vocational guidance; sex, cosmetic, and modeling lessons; evaluation and referral for surgery; and post-surgical counseling. Considerable time for making the surgical decision should be allowed. Most importantly, let us think of the

transsexual simply as different rather than sick, recognizing we do not know the cause but do know the destructive effects of labeling. We should–as individuals, as doctors, and as citizens–participate in the decriminalization of private sexual behavior between consenting adults, as several of us plan to do in California through the initiative process on the ballot in 1974 or through continued legislative efforts.

* * *

Discussion: Dr. Fort

The negative effects of stigmatization, rejection, and criminalization are objectively much worse than conditions such as transsexualism.

If you do not directly confront the issue and evade it or lie about it, you are never going to bring about change. I think that transsexuals can, should, and will associate with whomever they want to, including other transsexuals. The best way of dealing with that is to broaden their horizons. One of our real difficulties is an inability to deal with ambiguity and complexity. Because of that, we are accepting oversimplified pseudosolutions to everything which is pondered by politicians and the mass media. So a little bit of confusion is a desirable thing.

I favor a positive approach, making known to people a range of other human contacts, broadening their resources in the community, exposing them to many different people and points of view. Then, association with other transsexuals will become an increasingly smaller component of their total friendship or acquaintance network.

Experience at the Montreal General Hospital with Transsexualism

R. J. Gardiner, M.D.
H. C. Brown, M.D.
H. Warnes, M.D.

In 1971, a Gender Identity Clinic was established at the Montreal General Hospital, a teaching hospital of McGill University.

Certain characteristics of this clinic population will be presented which characterize it as a representative Canadian expression of work in the field of gender identity.

With the exception of the Minnesota group, the Canadian clinic populations tend to differ from the experience in the United States in that our patients are geographically located. With the advent of universal health insurance in Canada, medical care has become available to all Canadians. However, health delivery and health care is a provincial responsibility in Canada, and accordingly, medicare schemes are administered on a provincial basis. Patients do not tend, as a result of this, to cross between provinces for care, unless they are specifically referred from outside the provincial borders. Our group in Montreal, therefore, represents an experience isolated to a single geographic area, Quebec. It has patients of both French-speaking and English-speaking backgrounds. All of the patients in the clinic population were born, brought up, and live within the area in which they are being treated, with the exception of two patients referred from other provinces. One of these patients was specifically referred by a provincial health scheme in another province which agreed to finance the individual's referral and provide a form of monthly welfare coverage while that individual was in Montreal for assessment.

When the Gender Identity Clinic concept was approved by the Medical Advisory Board of the hospital, it was agreed that it should be a

multi-disciplinary team, and that all patients initially screened should be seen by a representative of each of the disciplines included. The Gender Identity Team consists of: two psychiatrists, two endocrinologists, two gynecologists, one plastic surgeon, and one urologist. The endocrinologist also functions as a general internist and is responsible for complete history and physical examination of each of the patients, with respect not only to their problem of gender identity, but to their general medical history and examination. Medical conditions such as congenital heart murmur, discovered in one of our patients, can be identified early on in the assessment process.

We have initially seen 27 male transsexuals, of whom 18 have been accepted by the group, and three female transsexuals, all of whom have been accepted by the group. This ratio of 6:1 is similar to that reported by other groups. We have several applications for assessment at the present time from female transsexuals, and it is possible that (as with other groups) we have not been seeing a representative ratio of male to female transsexuals.

Two of the female transsexuals and five of the male transsexuals have had operations; two males came to us having had previous surgery.

The average age of entry into our clinic is similar to that reported elsewhere. More than half of the patients were between 20 and 24; only one was over 34.

In initial assessment, all patients are seen by a representative of each discipline. Following agreement at a general meeting, and an agreement by the patients to stay with the team, they are taken into the program. Psychiatric follow-up of one year is required. Endocrine treatment is begun halfway through this period, and must be carried for a minimum of six months before operative procedures are undertaken. All patients have routine endocrine investigation, are karyotyped, and have any other routine medical investigation warranted by specific findings.

It would be appropriate to comment briefly on the question of inter-sex. We have had three male transsexuals who, by history and physical examination, have not had a normal pubescence. Many of their characteristics are pre-pubertal, but their complete endocrine investigation appears to be normal. It is possible that these patients have some form of end organ deficiency, but at the present time, this has not been demonstrated.

Fourteen of the group of 21 patients had been on therapy for over two years. A number of these patients had been taking extremely high doses of estrogens obtained by other than medical means. The question of whether or not high estrogen intake over a number of years may be pre-cancerous must be considered by all our groups, and more work is necessary in this area. Every attempt must be made by Gender Identity Teams to document the estrogen intake of their patients, and to insure that patients adhere to strict management of their intake. A number of male transsexuals, believing that high

estrogen intake leads to better breast development, will take more than the recommended dose.

Vaginal stenosis and infection have been a problem in the earliest operations.

Several points merit note at this time. First, there is no financial hindrance to our patients being seen by the group. There has been no publicity by the hospital on the availability of this service, and accordingly, patients come to the hospital either on referral (although this has not been a normal mechanism up to the present) or by word of mouth. As a result, the majority of our patients know or have known other transsexuals at some time. Over 80 percent of the patients come from lower socioeconomic backgrounds and are not highly educated. The majority of them have had problems with unemployment, worked in various "club" atmospheres, and failed to establish stable relationships during their developing years.

This makes it important that they be able to identify with the treating physician, and attempts have been made by various members of the team to fulfill this role and provide a regular doctor-patient relationship. The geographical localization of the patients with respect to the treating group allows them to be seen frequently during and following assessment, and at frequent intervals following operation by the operating surgeon and by the treating physician. They can be in phone contact at any time with their physicians. The effect of this close contact is to make long-term follow-up easier.

Summary

The Gender Identity Clinic at the Montreal General Hospital was established in 1971 and, to the present time, has a small group of patients under examination. The group consists of patients selected on a geographical basis and possibly is representative of the population at large in the Province of Quebec. There has been a preponderance of male transsexuals, many from a lower socioeconomic background, few with a university education. There has been a high degree of hormone intake prior to first assessment. Several of the patients have had initial operations elsewhere. To date, five males and three females have had operation procedures performed by the clinic.

The Toronto Gender Identity Project: A Preliminary Report

B. W. Steiner, M.B., Ch.B., D. Psych., F.R.C.P. (C)
D. Paitich, Ph.D.

The University of Toronto Gender Identity Project became clinically active in October, 1969, and closed its waiting list of patients in October, 1970, because a total of 88 patients had been referred (74 biological males and 14 biological females). Of these 88, 11 failed to complete Stage I. (They failed to either complete their questionnaire or their life history.) They were regarded as dropouts.

A further 11 patients dropped out after they had completed Stage I. These individuals refused to accept appointments for evaluation or wrote to say they had changed their minds, as they felt they were not transsexuals. A total of 66 patients were evaluated in the last three years, including 52 biological males and 13 biological females. Approximately one-third were rejected on completion of Stage II as being unsuitable for further evaluation. Of these, 29 were males and three were females. In addition, seven patients dropped out (five males and two females).

Stage III is an extension of Stage II with the emphasis on psychosocial evaluation. The family, spouse, and/or lover are interviewed in order to cross-check the information given by the patient. Twenty-six patients proceeded to Stage III, at the end of which four patients were rejected and three patients dropped out.

Stage IV is an intensive ten-day evaluation in the Clarke Institute of Psychiatry. Fifteen cases are still active out of 88 patients originally referred. Of these 15 active patients, 10 are biological males and five biological females. Four cases are still in the process of being evaluated in Stage III and have not yet proceeded to Stage IV.

Eight patients have undergone surgical sex reassignment, four male-to-female and four female-to-male (bilateral mammectomy and pan hysterectomy only). Three patients are waiting approval for surgery, and one is in long-term follow-up and was operated on in 1971.

In the original selection of patients for surgical sex reassignment, it was decided to exclude two groups. The first group consisted of patients who were legally married, excluded because of legal complications, and the second group involved the biological female patients, excluded because of poor surgical results to date and the kind of phallus substitution that was then available to the patient. However, it was decided to operate on a select group of biological female patients because they appear to be much more stable than the biological males.

IV Psychological and Religious Aspects of Transsexualism

Gender Identity Problems: The Church's View

Robert J. Oliver, M.D.

Zoological and cross culture studies clearly demonstrate sexual identification goes far beyond the reproductive function. We must remember in our consideration, then, that the "instinct" of sexual identity is influenced by many social and moral pressures. Patterns of sexual behavior evolve with the species. At higher mammalian levels, there is an increasing emphasis on the various sex-related activities rather than on purely reproductive ones. Ideals of romantic love are a late development in modern history (12th century A.D.). Moral sanctioning by the medieval church exalted celibacy and virginity, and meted out cruel penalties to enforce its sexual taboos. Herein came about "rules of procreativity," concerning the nature of man and woman and the basic principle that gonadal sex *only* can serve as a valid criterion in determining sex identity. Thus, only in nature is an assumed instinct attributed. We find in nature that the *lower* in the scale of evolution an animal is placed, the more totally instinctual the patterns of sex differentiation. As one moves up the evolutionary scale, inherited instinctual behavior patterns become less pronounced and more modified by learning.[8] The moral viewpoint is then suggested to recognize a category of *sex* which does take into account the Creator's grand design and places reproduction on a much lower scale of importance. The 20 percent infertility rate, the higher incidence of Mosaicism genetically, and the not-infrequent intersexual problems are recognized by the modern Church and their needs for treatment emphasized.

The psychosexual neutrality at birth permits the development and perpetuation of diverse patterns of psychosexual orientation and functioning, "in accordance with the life experiences each individual may encounter and transact."[9] Hormonal influences on the fetus are profound and only now are

they being shown to reflect themselves as a sexuality pattern in the person upon whom they acted. The effect of testosterone is strongly identified in the female by higher intelligence, more goal-setting drives, and less fantasy content and daydreams. Without the proper advent of testosterone in the male fetus, a more female-directed male appears, with all the characteristics usually associated with the female role.

In light of the present medical knowledge, it has become improper for law to rely on outward appearance for the determination of an individual's sex, considering that determination has important legal and moral implications. The analysis must be made on the parameters to arrive at an "administrable and equitable legal standard by which to test a person's sex, while preserving the traditional sexual dichotomy."[1]

Medically, the following standards are relevant:

1. Karyotyping
2. Gonadal sex
3. Sex hormone patterns
4. Internal sex organs other than gonads
5. External genitalia
6. Secondary sex characteristics
7. Sex rearing (sex at birth and family assignment)
8. Assumed sex role (psychological sex role)
9. Sexual object desire.

Sexual assignment based on all being in accord would be ludicrous. A hermaphrodite would be ambiguous; Joan of Arc would be a transvestite; and a homosexual would be a confusion. A simple majority of agreeing factors also would be grossly inaccurate, since this would require *each* factor to have equal significance. Where then would you place the nun, the monk, the priest or eunuch? The chromosome test would thereby place the person raised, characterized, and genitalized as a male in a classification of a female (pseudo-hermaphrodite). We could use the same asinine approach to Gainesborough's "Blue Boy," or "Mona Lisa" by DaVinci, as canvas, pigment and oil.

A standard based on any one or groups of the above basic ingredients could be more confusing than clear. But a standard must be established. This is being accomplished by the Gender Identity team approach throughout the United States. The approach is recognized as the *only* legal and medical approach to this perplexing problem.[3] On this basis, the whole problem of how human beings normally get their sense of maleness or femaleness is being studied. Each additional fact lends additional credence to Benjamin's original thesis—the sex of the individual can be determined and placed on a scale of sexuality. This scale is found in his book: *The Transsexual Phenomena* and the introduction to Paul's *Adult Manifestations of Male Transsexualism:*

The nine factors can, thus, be reduced to:

1. Biological factors (sex chromosomes, gonad, hormones)
2. Nature of the external genitalia
3. Gender role assigned by the parents
4. Nature of psychosocial environment.

Besides physical intersexuality, psychical intersexualization is considered in the review by Sister Madigan; "Moral conclusions separate the homosexual and the transvestite" and "all surgery to alter (them) so that they may function as members of the opposite sex must be condemned. (They should receive proper psychotherapy to bring about social rehabilitation)."[7] Thereby, the Church indicates in this dissertation the need for identifying the transsexual as "male" or "female."

To best define gender (sex) *role* and gender *identity*, we must realize that sex and gender are usually congruent, in that males would usually be manly and females will usually be womanly. However, these may not always be synchronous to the eye. In *gender role*, these are the things that a person usually does or says to disclose himself or herself as having status as a man or a woman: the way he or she walks, talks, acts, dresses, works, plays, relates to others, etc. *Gender identity*, however, reflects the individual's inner psychosocial sense of himself or herself, rather than his physical or sexual sense of himself. The *gender role* is the outward expression of his *gender identity*. Ideally, a person's sexual identity and sexual behavior and gender identity and gender role will be in perfect accord. This is what we recognize in the majority of people.

Moral aspects of the identity in sexuality have arisen as a result of remedies suggested. "For sex, sexuality, and the concepts of maleness and femaleness become unintelligible, once they are divorced from the concept of reproduction."[5] Only changes of sex are allowed which will enable the individual to become adjusted to life in society in his or her proper sex. "Any surgery or medical treatment that helps make the individual more in accord with his or her true sex is morally justified, as is any other procedure which contributes to the betterment of the whole person."[6]

In review of the two letters,[10, 11] from two prominent theologians of the Catholic Church, we see no conflict of opinion. If carefully examined on the basis of the facts presented therein, they indicate a moral approval of the reassignment surgery. First, Father O'Donnell would concur with Sister Madigan and Father Dosh indicating that to do "surgery or pharmacological change for a morphological identifiable male into a female because of a *female gender role* (transvestism) and (vice versa) as morally wrong."[10] However, as he states, "in cases where sex variables are totally equivocable [a condition which we have seen which is not only impossible, but gives equal weight to all]

the corrective approach may be toward either sex, depending upon the choice of the patient—after medical consultation. But where one sex is identifiable as predominantly determined, then corrective measures *must* be in the direction of the determined sex."

Father Curran of the Catholic University of America states, "Catholic theology has always realized the fact that in some people there is a combination of two sexes." He then goes on to describe the difficulty of identifying the true sex and states that theologians are limited in determining the true sex. "Such a judgment can only be made by the people who are competent in this area. If a competent doctor decides that one sex is the true sex of the person, then he may take the means necessary to insure that the person has this sex and these sexual characteristics, even though it might involve surgery, as well as hormone treatments." In a later communication, 1972, Father Curran states, "The basic problem from the moral and ethical viewpoint is the question of determining the proper sex of the individual. In this regard it seems to me that one cannot determine sexuality solely in accord with the external genitalia, but the sign must be of a much more extensive nature. The operation would, therefore, have as its purpose giving the person the sex which seems to belong to him or her."

Thus, it appears that these great Catholic theologians agree that the *gender identity*, not *role*, determine the *true sex* of the individual, and in this accord requires sex reassignment. Determination of the *gender identity* is totally medical and psychological, based upon extensive interviews and *gender role playing*. They both agree that surgery must not be performed only for *gender role!* It appears that the *gender role* must be separated in an individual through expert modes from the *gender identity*. Thus the *gender identity* is known by evaluation of the categories of sexual role, sexual identity and gender role. It behooves medicine to provide the necessary treatment. No one but the individual involved should obstruct the course of that person's life on presumed moral or ethical grounds.

References

1. Bartholomew, *Hermaphrodites and the Law*, 2 Malaya L. Rev. 83, 89 (1969).

2. Bowman, Engle, *Medicolegal Aspects of Transsexualism*, 113 Amer. J. Psych. 583-584, 1957.

3. Green, R., and Roney, J., *Year Book of Obstetrics and Gynecology*, 1972. J. P. Greenhill, ed. Copyright 1972 Year Book Publishers.

4. Katy, Jack, *Biological and Psychological Notes of Psychosexual Identity.* Medical Aspects of Human Sexuality. 103, Vol. 6:6, 1972.

5. Joanne M. Madigan, S. J. *Intersexuality and Its Moral Aspects,* Pontificia Universitas Gregoriana, Romae, 1956.

6. Ibid.

7. Ibid.

8. Marmour, Judd, *Normal and Deviant Sexual Behavior,* J.A.M.A., 217, 165, 1971.

9. Hampson, J. L., Hampson, Joan C., *The Ondoignesis of Sexual Behavior in Man,* in Young, W. C. (ed.), *Sex and Internal Secretions,* Baltimore, Williams and Wilkins, 1961.

10. Communication to Sister Virginia Schwager, United States Catholic Conference from Father T. J. O'Donnell, S. J., June, 1973.

11. Communication to a Transsexual from Fr. C. E. Curran, Feb., 1968.

A Psychological Study of Transsexualism

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Psychiatric judgments about male-to-female transsexuals have ranged widely, from the opinion that the request for sex change is a sign of severe psychopathology to the opinion that these persons are psychologically normal, merely misclassified in gender. These views often reflect differing views on the origin and development of the condition. Those seeing severe psychopathology have generally held psychological (not biological) views of the cause; they have seen gender identity as learned through early childhood experiences. It is believed that certain atypical experiences, unusual kinds of interactions with one's parents, result in a stunting of one's ability to enjoy using one's organs in a mature, genital act with someone of the opposite anatomical sex. In this view the transsexual is regarded as undeveloped psychologically; as immature; as crippled; as disabled, if not sick. This view puts the transsexual in a broader group—with the impotent, the frigid, and the homosexual—all lacking self-actualization or fulfillment and having failed to reach their full potential development.[1]

This view was expressed in a burst of short articles and letters to editors of professional journals, mostly by male psychoanalysts,[2,3,4,5,6,7] beginning shortly after publication of the Jorgensen case.[8] Pregenital fixations were pointed out. The belief of an anatomical male that he is in some sense "really" a female was stamped as delusional; and the request for amputation of male organs was called self-mutilating, self-destructive, masochistic, and suicidal. One physician[7] wrote of "the delusional hope that he can really be transformed into something that he is not." These writings generally urged the

surgeons not to operate, not to fall in with the patient's delusions. Instead, they suggested treatment by psychoanalysis or other forms of psychotherapy.

At the other extreme is the view that the transsexual man is psychologically normal and healthy, but only misclassified; he is a normal female in everything but anatomy. Of course, he may be anxious and discouraged, but that psychological condition is the result, not the cause, of his trouble, and will disappear when he is anatomically changed in sex and socially reclassified in gender. This view has been implied more often than directly stated. It has commonly gone with a view of transsexuality as biologically inherited and not learned (one cannot be blamed for what he has genetically inherited, but one may be blamed for what he has learned), and so it has usually served to justify a liberal, permissive attitude toward surgery.

Curiously, a liberal and permissive attitude toward surgery has sometimes gone with some conservative premises; i.e., that surgery is not justified to change a person's sex, but only to change the anatomy to agree with the person's "true" sex—whatever that may mean. To some of these persons, *true* sex means *biological* sex. Therefore, the persons following this view have felt obliged to believe that the male transsexual (despite all the obvious evidence) must be in some way a true biological female. Hamburger, in the JAMA article describing his surgery in the Jorgensen case,[8] voiced his belief that transsexual males are genetic females (XX) who have been masculinized in every visible biological way, but through some subtle genetic influence, keep a female psychological identification. The view is implausible—from all we know, psychological identification is more likely the first than the last aspect to depart from genetics—but it was only disproven in recent years when improved technology made routine chromosome determination feasible. And Benjamin, as recently as 1971, wrote "[it] suggests to me a prenatal, neuro-endocrine abnormality. No one is justified at this time in saying categorically that transsexuals are made, not born."[9] Evidently Benjamin, like Hamburger, would feel guilty about transsexual surgery if he could not persuade himself that somehow male transsexuals are biologically female.

There are signs that Hamburger did not believe his own theory. In the same JAMA article cited, he said that he only removed Jorgensen's male organs, and did not build a vagina, because to do so would be "undesirable from an ethical point of view."[8] If he had believed that his patient was "really" (genetically) a female, no good reason appears for regarding construction of a vagina as unethical.

So we see several issues twined together: (1) whether sex-change surgery should be done on transsexuals; (2) whether transsexuals are psychologically normal, healthy, and not crippled; (3) whether transsexual identification arises from psychosocial learning or from biological, genetic causes. It is curious that in transsexualism it is the biological view of causation that tends to go with the

liberal plan of action, while on other social issues, such as race and class differences in abilities, the reverse is true. Be that as it may, the linking of issues is not logically necessary. It is possible to believe that sex identity is learned, and yet not believe that a transsexual identity is learned, and yet to believe that reversing the learning is more difficult than changing the anatomy; and it is possible to believe that transsexual identity is sick or disabling, and yet to approve of transsexual surgery on grounds of John Stuart Mill's principle that every man should be free to do as he please, if only he not harm anybody else.[4]

Between the extreme positions (that transsexuals are psychologically normal, and that they are severely sick), Stoller has expressed an intermediate judgment: "Each of the transsexual 'women' [i.e., male to female] we have tested psychologically has shown a personality typically found in the tests of hysterical women."[11] Is this a label of sickness? Yes and no. Hysterical personality (or phallic or Oedipal personality, in psychoanalytic terms) is, like compulsive (anal) personality and passive-aggressive (oral) personality, classed as a personality trait disorder. It is used as a psychiatric diagnostic label, and yet also used as a term for classifying normal people into personality types. Everybody has his own favorite defense mechanisms and, in one use of the terms, everyone can be classes by his defense mechanisms into one of several personality types. One whose favorite defense mechanisms are repression and denial, and perhaps also dissociation and/or conversion, will be called hysterical. Another whose favorite defenses are reaction formation, undoing, and isolation, will be called a compulsive personality.

In designing the University of Kentucky and Behaviordyne system, we had to decide whether to label a personality type for everybody. We decided not to. Everyone is tested for hysterical personality and given the label if the conditions are met. Everyone is also tested for compulsive personality, paranoid personality, and so forth. Some people get more than one personality label, and others get none. The labels are not discrete categories. About a fifth of the general population will be called hysterical personalities in our system.

One test for hysterical personality is the Hysterical Average, the mean score of several scales related to the characteristic. They all have means of 50 and sigmas of 10, and the Average itself has a mean of 50 and a sigma close to 5 in the general population. The Hysterical Average does not vary significantly with test-taking attitude nor with general anxiety level. The computer applies the label *hysterical personality* to anyone over one standard deviation above the mean, which means about 16% of the general population. It also applies the label to other cases on the basis of the two-point code. The two conditions are in effect logically linked by an inclusive *OR*.

The transsexual cases were analyzed both as males and as females.

Results

This report deals with the psychological findings on our first 12 transsexual patients at the University of Kentucky. Case 7 is a female who will have surgery to become a male. The other 11 were males seeking change to female status. Case 12 was the only one rejected for surgery as too psychotic; curiously enough, this is not the most psychotic case in our analysis. Case 12 was given psychotherapy by a resident, but has made little progress. Case 11 dropped out of sight after a psychiatric consultation. Case 10, because of physical complications, was scheduled for surgery in three phases, the third of which is yet to come. Case 8 is scheduled. Cases 4, 5, 6, and 9 have had surgery, but no follow-up. Cases 1, 2, and 3 had surgery and are pleased with the results; Case 1 has married a man.

Diagnostic statements were printed out by the computer for the twelve cases. In each case several diagnoses were printed in order of preference. We emphasize that a clinical diagnosis should never be made from a psychological test alone, nor from any other laboratory test alone, but only from the whole case history and all the examinations.

The principal diagnosis was hysterical personality in three cases (numbers 1, 5, and 6); paranoid schizophrenia in two cases (numbers 2 and 3); paranoid personality in three cases (numbers 8, 9, and 12). The remaining four cases were scattered: one depression, one sociopath, and one (case 7) in which "normal" was the preferred diagnosis, though other labels were possible. In this count, we have deleted potential alcoholic and potential drug abuser from principal diagnoses.

Signs of impaired thinking showed in a strong minority of cases. Besides the two cases in which paranoid schizophrenia seemed the preferred diagnosis, there were three other cases of paranoid personality in which the psychotic trends barely missed the level that would be called psychotic. Two of them would have been called schizoaffective (with paranoid features) if psychotic, because of the presence of depressive elements. None of these cases was considered ultimately psychotic in the psychoanalyst's interview, or they would not have been given surgery.

The most prevailing feature in the group was hysterical personality, found in two-thirds of the 12 cases. In three cases it was the principal diagnosis, and in five other cases it was a secondary feature. This finding confirms that of Stoller.[10]

Depression was another theme. It was the principal diagnosis in one case, case 11, and was a secondary feature of several others (cases 9, 10, 12, and possibly 4).

The two-point codes in the cases were: 38, 68, 64, 42, 64, 49, 34, 63, 62, 28, 24, and 26. Here, and in subsequent data cited, information is given in the order of case number, so that it can be compared with the diagnostic data

already given. For those not familiar with the MMPI, digit 6 shows paranoid trends; 8, schizoid trends; 2, depression; and 4, rebellion, demandingness, resentment, and sometimes sociopathy, or delinquency.

On the LFK indicators of test-taking attitude, five cases had an upright V pattern, five an inverted V, and two were equivocal. Thus, there appeared no consistent tendency to try to look either sick or healthy. Scores calculated on the A factor, a measure of anxiety or general maladjustment, were 36, 48, 49.6, 55, 38, 67, 49, 62, 49.8, 55, 68 and 61, and agreed in general with the LFK indicators. Neither of the two cases considered psychotic had any plus-getting signs, and both had A factor scores just under the general population mean of 50, though they came out psychotic on such well-accepted tests as the Meehl-Dahlstrom and the Taulbee-Sisson.

The Hysterical Average exceeded the general population mean of 50 in all 12 cases, in contrast to a comparable measure of compulsive character, which did so in only six of the 12.

The Responsibility Average, a measure of strength of conscience, was below 50 in 10 of the 12 cases. Scale Pd (with K correction) exceeded 50 in 11 of 12 cases.

Scale 123 H, a measure of unconscious hostility, was above 50 in 11 of the 12 cases. The scores were 54, 65, 64, 67, 56, 46, 58, 62, 60, 55, 68, and 51. This is a subtle measure, very difficult to falsify.

At length, let us look at measures of masculinity-femininity. Most psychological testing of transsexuals has focused on such measures, for understandable reasons, though I suspect it is not the most productive focus. Male-to-female transsexuals have generally shown up as feminine. One problem is that there are several rather different measures of femininity from the MMPI, the California PI, the Strong VIP, and other tests, and they do not correlate very well. They seem to measure different things. Perhaps it would help if somebody would use a full set of masculinity-femininity measures as part of an extensive battery of tests, comparing a large group of male transsexuals, female transsexuals, homosexuals, Lesbians, and various kinds of normal groups. Then, we might learn just what kind of femininity makes the difference.

The so-called masculinity-femininity (Mf) scale of the MMPI was derived from research to discriminate male homosexuals from other males, and rested on 13 cases.[11,12] The criterion cases were not only homosexual, but also of higher educational status than the controls. Therefore, the derived scale was found to yield high scores not only on homosexuals, but also on normal men with high education or esthetic cultural interests. It was also found to yield high scores in normal women. Later an Mf scale for women (Mff) was published, to measure masculinity-femininity in females. The items were the same as those in the Mf scale for men (Mfm), but the direction of scoring was reversed for some items. The greater number of items had obvious manifest

content either feminine or literary or artistic, and those responses were scored feminine for either sex. A smaller number of statements either proclaimed dissatisfaction about sex or admitted homosexual impulses. Responses of this kind were counted as feminine in a male and masculine in a female. We have called these subscales Mfem and Mhom respectively.

The scale scores cited in this paper are based on our own restandardization of the MMPI. Scores for nearly all scales, including Pd and 123H, are based on norms for adult men and women together. The same applies for the Mfem and Mhom scores cited. The scores given for Mfm, based on male standards, are about 7 points higher than would be found with a mixed-sex standard, or 14 points higher than with a female normative group. The scores given for Mff, based on female norms, are 7 points higher than they would be on a mixed standard, or 14 points higher than they would be with a male standard.

Every one of the 12 cases scored highly "feminine" or "homosexual" on the Mfm scale by male standards. The respective scores were 77, 73, 83, 79, 76, 83, 59, 70, 79, 83, 87, and 63. These would be very impressive scores indeed, except for two considerations: (1) the nature of the scale is such that high scores may mean femininity or homosexuality or high education or aestheticism; and (2) the content of the statements is highly obvious and scores on this scale are easy to fake by anyone motivated to do so. Unfortunately, at our center and elsewhere, testing is done at a time when the transsexuals feel that they must prove their femininity.

On the Mff scale, nine of the 12 scores more "feminine" than the average female. The respective scores were 40, 32, 28, 40, 46, 39, 76, 52, 43, 49, 45, and 59.5. High scores indicate masculinity in a female, and were found in cases 7 and (to a lesser extent) 12 and 8.

The differences between scores on scales Mfm and Mff would seem a fair measure of femininity. On that basis, 8 of the 12 cases fall on the feminine side, the exceptions being cases 6, 7, 10 and 12. This measure does *not* fully avoid the distorting effect of effort to look feminine.

Both scales Mfm and Mff can be broken into identical subscales. One, Mfem, consists of items scored in the feminine direction for both scales. The other, Mhom, consists of the items scored feminine for males and masculine for females.[13] On scale Mfem, normed for mixed sexes, 11 of the 12 cases scored on the feminine side. The one exception was case 7, and case 12 was somewhat marginal. On scale Mhom, 9 of the 12 cases scored in the direction indicating sexual distress or homosexuality, the exceptions being cases 2, 3 and 12; case 8 was marginal. Transsexuals may have some difficulty in answering some items on the Mhom scale. Asked whether he (she) feels sexually attracted by members of his (her) own sex, the preoperative transsexual may wonder whether to respond in terms of the anatomical sex or the chosen gender

identity.

Now, as to the type of "femininity" shown, we do not have a wide variety of measures since only one test, the MMPI, was analyzed. Still, we have some data. In the California Psychological Inventory (CPI), Gough developed a femininity scale (Fe) to distinguish men from women.[14] Since nearly half the items of the CPI are taken from the MMPI, the CPI scales can be scored on the MMPI in shortened form. Our computer program routinely does so, giving the CPI scores based on mixed-sex norms for the short scales. The meaning of Gough's Fe differs from that of the MMPI measures. Highly "feminine" scores on Mfm, Mff, and Mfem are a sign of being flirtatious, coyly sexy, and somewhat hysterical in personality. (These three scales, of course, have most of their items in common.) In contrast, high scores on Gough's Fe scale have more of a maternal, warmly feminine quality. One might almost say that Gough's Fe scales measure femininity at its best.

To detect the type of femininity shown, we took the difference in scores between each of two MMPI scales (Mfem and Mff) and Fe, after making appropriate corrections for the difference in norms of standardization. Mfem predominated over Fe in 9 of the 12 transsexual cases (the exceptions being cases 7, 10, and 12, which as we have seen, did not appear very feminine, anyway). Likewise, Mff predominated over Fe in 8 of the 12 cases, the exceptions being cases 6, 7, 10 and 12. (Case 6 was feminine on both measures, but more so on scale Fe.) So we see some evidence that the "femininity" found in male-to-female transsexuals is more the coy, flirtatious type of femininity than the maternal type. This finding, based on test scores, is consistent with the clinical findings of Money and Primrose, who reported that male-to-female transsexuals differ from women in the absence of pregnancy fantasies and the absence of special attraction to the helpless newborn.

Ultrafeminine scores on Mff are often found clinically in "bitchy" women, whose aggressive hostility to men is expressed indirectly disguised as flirtatious and pseudo-passive behavior. This is especially true when the Pd score is high, so the Pd-Mff difference is taken as a measure of a woman's use of sexuality as a weapon against men. Pd-Mff difference, in T points, for the 12 cases are: 19, 34, 34, 29, 15, 23, -18, -2, 14, 7.5, 22, and -5. Several cases show trends in the described direction; in case 2 the signs were strong enough to print a diagnostic statement to that effect. (Case 3 met the requirement of 30 points difference, but failed to meet the corequirement of Pd at least 65.)

Summary

The MMPIs of 11 male transsexuals, tested before male-to-female surgery, were analyzed by the University of Kentucky system of psychological assessment by computer. The most pervasive finding was hysterical personality

trends of repression denial and dissociation, found in eight cases. A substantial minority of five cases showed significant paranoid schizophrenic trends. The extent and type of "femininity" shown were tentatively explored.

Note for Future Study

In follow-up, it will be interesting to see whether the one case considered an antisocial sociopath and the five cases with paranoid schizophrenic trends fare worse than the healthier-appearing cases.

We regret that these people come to the psychiatrist and the psychologist only on referral from the surgeon. At this stage, they are not seeking advice or help in making their minds up. Nor are they seeking personality change, treatment or help for emotional problems. Their minds are made up. They believe they know what they want. They have decided to demand surgery and, in desperation, they may be impatient. The psychiatrist and the psychologist are not seen as helpers but as obstacles put in their way by the surgeon. The task is to convince the psychologist or psychiatrist to agree to a solution already chosen, not to use his help in finding a solution to a problem. This framework distorts the performance on the psychological tests. The outcome may be an unwise decision.

We should prefer to see the transsexual at an earlier stage. We should like him to come to the psychologist for counseling when he first begins to think of the possibility of changing his gender. We should like him to seek professional help in making a wise decision. Under those circumstances, with an open mind, the individual can use a broad range of psychological tests as a way of exploring his self, testing his self-perception against objective evidence, and forming a realistic concept of himself, through which he can comfortably and honestly respect himself. Under those circumstances, freed from haste and desperation, a person can learn to choose wisely.

References

1. The commonly accepted distinction between the homosexual and the transsexual male is that the former enjoys using his male organ in acts with other males, and therefore, must recognize that he is a male and wishes to continue being a male; while the latter, getting no pleasure from his own organ, and feeling distaste for it, wishes to get rid of it and be accepted as a female. The transsexual resists being a homosexual and asserts superiority to homosexuals, in that an effeminate homosexual can attract only homosexual men, while the transsexual takes pride in the ability to attract a real, masculine, heterosexual man. ("My man is more masculine than your man.")

2. Wiedeman, George H. Letter to editor. *Journal of the American Medical Association, 152:* 1167, 1953.

3. Ostow, M. Letter to editor. *Journal of the American Medical Association, 152:* 1553, 1953.

4. Gutheil, E. A.: The psychological background of transsexualism and transvestism. *American Journal of Psychotherapy, 8:* 231, 1954.

5. Worden, F. G., and Marsh, J. T.: Psychological factors in men seeking sex transformation. *Journal of the American Medical Association, 157:* 1292, 1955.

6. Meerlo, J. A. M.: Change of sex and collaboration with the psychosis. *American Journal of Psychiatry, 124:* 263, 1967.

7. Russell, D. A.: The sex-conversion controversy. *New England Journal of Medicine, 279:* 535, 1968.

8. Hamburger, C., Sturup, G. K., and Dahl-Iverson, E.: Transvestism: Hormonal, psychiatric and surgical treatment. *Journal of the American Medical Association, 152:* 391, 1953.

9. Benjamin, H.: Should surgery be performed on transsexuals? *American Journal of Psychotherapy, 25:* 74, 1971.

10. Stoller, R. J.: *Sex and Gender.* New York: Science House, 1968, p. 192.

11. Hathaway, S. R.: Scales 5 (Masculinity-Femininity), 6 (Paranoia) and 8 (Schizophrenia). In Welsh, G. S. and Dahlstrom, W. G. *Basic Readings on the MMPI in Psychology and Medicine.* Minneapolis: University of Minnesota, 1956, pp. 104-111.

12. Kleinmuntz, B:: *Personality Measurement.* Homewood, Illinois: Dorsey, 1967, p. 223.

13. Dahlstrom, W. G., and Welsh, G. S.: *An MMPI Handbook.* Minneapolis: University of Minnesota, 1960, p. 459.

14. Megargee, E. I.: *The California Psychological Inventory Handbook.* San Francisco: Fosser-Bass, 1972, p. 90.

Psychological Aspects of the Peri-Operative Period in the Transsexual

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Reports on the postoperative phase of transsexual operations can be found in medical literature, either dealing with the success of the physical procedure or with the psychosocial adjustments that follow sex conversion. My purpose is to report on psychological aspects of the patient during the time immediately before and after the operation. Hopefully, insights into what takes place during this period will promote an understanding of other aspects of transsexualism, and lead to better management of patient care.

Case Presentation

A 24-year-old male transsexual had a mammaplasty and reduction mentoplasty a year before she came to our attention at the University of Virginia. By this time she was cross-dressing and enjoying success in the entertainment world. My report deals with the first two operations undergone by this patient; they comprised the first two stages of the sexual conversion.

In the *Preoperative Stage* we had occasion to see this patient the evening before surgery was scheduled, three months after our last encounter. She had not kept her regular appointment with us, but confided on the eve of her operation that she felt the psychiatric insights we provided had kindled ambivalence about the planned surgery and led her to doubt its wisdom. She emphasized, however, that she had been pleased with what she had learned about herself and that making her decision had enriched her interpersonal life. She was aware that she was going to undergo a two-stage operation and seemed to be properly prepared for what to expect. In our conversation, she reported an interesting reaction she had had when asked to prep herself. As she shaved

her pubic region she became greatly disconcerted at the thought that she might cut her penis off herself with the razor. Permitting her to shave herself may have been unwise; ordinarily, she would keep her penis taped up in the groin and refrain from looking at it. This was the first time she found herself forced to give attention to this part of her body. As she walked back to the surgical floor she remarked, "The life I knew is ending. It was my life."

The Operation. The patient, who had received Droperidol as part of her premedication, appeared confused and disoriented on the way to the operating room. It was reported that when she was in the operating room her voice dropped three octaves in a way that greatly upset the anesthetist, who was so distressed that he is still reluctant to talk about the experience. The patient became combative and had to be transferred from the stretcher to the operating table by attendants. In a confused male voice she asked, "What am I supposed to do? Where are you taking me? Is it going to hurt? Is Dr. X going to be here?"

Postoperative Period. The patient remained in the hospital for about 21 days. During the first two or three postoperative days, she stated that she experienced considerably less pain than she had after reduction mentoplasty or mammoplasty. This reassured her and reinforced her idea that dealing with some of the ambivalent issues in the preoperative period may have reduced the pain equivalent of depression or sadness. On the fourth or fifth day she began to have more pain and complained of the uncomfortable posture she was required to maintain.

She became progressively more demanding; the nursing personnel and medical students with whom she came in contact described her as "bitchy." She became increasingly uncooperative and, on the eighth postoperative day, pulled out the Foley catheter and began having difficulties with insomnia and loss of appetite. It was necessary for a few days to feed her intravenously. This phase lasted through the second week and half of the third when, suddenly, her depression disappeared after she watched a television show called "copy-cats," in which the actors mimicked one another in role and appearance.

During the final days of hospitalization she began to complain that she had been cheated—that she should have been converted into a complete woman in a single operation. She declared she was not really prepared to have to undergo two stages of surgery, and found it unbearable to wait during a time when she felt herself to be neither man nor woman.

Although she had initially expressed satisfaction with her relationship with the psychiatric team, she began during the second week to find fault, complaining that psychiatry was of no use to her, and that the male psychiatrist on the team lacked an understanding of any aspect of female personality or female strivings and should be replaced—or at least supplemented—by a woman psychiatrist.

This disaffection lasted during the latter part of the hospital stay. During this time she was a great trial to her nurses, very demanding and impatient. I witnessed one incident when she rang for the nurse to get medication for the relief of her pain. When the nurse replied with a promise that she would come immediately, she rang again—exactly five seconds after her first summons—and said crossly, "I have been waiting here for this medicine and who is coming with it?"

I had an opportunity to work this through with her. She was having desertion fantasies of being left alone by the people around her. She felt that she was going to be neglected and shunned. She spoke often of being "unsexed" and of being "reborn" and in need of someone to look after her. As she awaited the second operation, she felt herself to be without either a male or a female identity.

Upon being discharged from the hospital, she went home and went on a shopping binge, buying a feminine wardrobe, cosmetics, and articles for grooming her hair. She still had some difficulty sleeping, and was aware that she was hyperactive. About the eighth day after her discharge she finally collapsed on the street and was given sedation when she was taken to the office of a physician.

Frequent but brief psychiatric visits were continued during her second period of hospitalization. She continued to insist that only female psychiatrists could be of any use to her, but as her apprehensions and desertion fantasies were brought to the surface, she became more communicative and lost some of her hostility.

Discussion

I have attempted to present our experience with this patient to convey its quality and possible causes. In any single case, one can only posit the underlying cause and recognize that there is more than one factor at work. One is surely the loss of the male organ, though it is striking how vehemently most transsexuals initially insist they will have no grief or vague regret, but only pure joy, since the penis has always been totally rejected.

In spite of such declarations, dream material has demonstrated to us that such patients have great unconscious ambivalence about this loss. I find it likely that they go through the dynamics of loss, which typically move from an initial denial to anger, and eventuate in grief. The resolution of this process and anger at the separation of the male organ and loss of male identity may then be directed toward the male psychiatrists—or other men.

Another element may refer to the Oedipal situation. This patient's concept of herself was that she was a female person unfortunately born into a male body. Her mother had wanted a daughter, her father a son, so her

conversion was "nature's compromise," an effort to satisfy both parents. The surrender of her maleness seen in that light constituted a rebellion against her father, and also part of the separation mechanism, causing her to feel anger toward all males around her.

An acute identity crisis seemed also involved during this time, a crisis inconsistent with the expressed notion that such a patient has a well-established identity of the sex opposite to the one received at birth. If this was firm, the removal of unwanted sex organs should not precipitate an identity crisis. This patient seemed to have had a period of severe anxiety and panic, with feelings of being unsexed, neither man nor woman, between the two stages of her surgical conversion. Subsequent dreams in which she mentioned similar situations, such as copy-cats mimicking others, seem significant also. She resolved her conflict and obtained an identity by copying female behavior. After she was discharged from the hospital, she went back to New York and spent the next week incessantly shopping on Fifth Avenue, to the point of collapse at the week's end, when she had to be carried from the pavement to the office of a physician who administered sedatives and calmed her down. She was overactively doing feminine maneuvers to reinforce her shaky identification.

All these factors led to severe regression, which caused management problems in this as in any other patient. And when the patient became unreasonable, the reaction of hospital personnel aggravated the situation.

Fantasies of desertion constituted the fourth factor. These may be explained in part by the patient's severe regression, since the more regressed one becomes, the more dependent one is on others in the immediate environment. Preoccupation with being deserted was expressed verbally by this patient, from whom Dr. X was fortuitously separated by an absence from town for a few days, and whom I failed to visit during the same period because of illness. Her fear of desertion came true in fact, because those persons most closely involved in her postoperative care were indeed unavailable to her.

Since this was the first case of this sort cared for at the University of Virginia Hospital, it aroused considerable curiosity; this made her to some an object of attraction, to others one of revulsion. It is usual, for example, for nurses assigned to the recovery room to sit by patients for a long time to monitor their condition, but a medical student was the only attendant to watch over this patient. No nurse was willing to look after her. Other responses seemed to depend on sex; we felt that many of the staff physicians reacted strongly to what had been done. One reported that as he made rounds he felt tremors in his genital area, wondering if he would be the next to be castrated. I think a conversion procedure does generate some castration anxiety in male personnel in contact with the patient. There seems also to be some response to the patient's rejection of maleness in his rejection of the male role for himself.

Women seem to react in three ways, some feeling pleasure and satisfaction that a man would surrender his masculinity and not only convert to a female identity, but do it successfully. It was interesting to observe a kind of jealousy and envy among some women, exemplified by a female medical student who noted that this patient had all of the fun of her sex but none of the problems such as menstruation and pregnancy. The third attitude was a grudging acceptance of the new recruit to womanhood, with recognition that she was a second-class candidate. They said, in effect, "Yes, you are now a woman; you are one of us, but you are different. You are not like us."

Conclusion

It is hoped that such studies of the various psychological aspects of the transsexual during the peri-operative period will enhance our understanding of the phenomenon of transsexualism and also lead to better management and care of the patient during this critical phase of her life.

Discussion: Dr. Bhatti

In the male, there was no dream material suggestive of masochism. Our other patient was a female transsexual, who did show masochistic aspects in her relationships with friends during sexual activities. The dream materials of each were mainly focused on their concerns about their identity. The male transsexual, for example, had dreams about boys playing outside whom she could not join because they were so rough. This reflected her concept of a masculine relationship. Then, suddenly, in a dream she would be dressed in female clothes, and she would find acceptance from everyone in an environment of love and warmth without fighting.

It is very difficult to imagine how one could have a particular organ of one's body for 24 years and then lose it without having any feeling about the loss. Consciously, the person insists there are no feelings invested in the organ, but at the same time, when we run through the intimate histories of such patients, we find periods of their seeking ejaculations and erections. They have obtained pleasure from it, so I think the nervous system (and the psyche) has a memory of good association. When the organ is lost there is going to be a reaction, whether it is on the conscious level and is consciously dealt with, or unconscious and manifested in other ways. If we can deal with and examine some of these issues in the preoperative period, and the patient has a chance to grieve over the loss in the postoperative period, he will do much better than if he did not grieve, for in the latter case we have something like pathological grief reaction on a long-term basis.

Psychological Test Assessment of Gender Patients

Daniel Paitich, Ph.D.

I became active in the Gender Project of the Clarke Institute, Toronto, because I was responsible for psychological services to forensic patients, and on this service 45 percent of our case load consisted of sex deviates. We assembled a battery of self-administering tests that we eventually automated by writing computer programs for the scoring and interpretation of all tests. (The system, CAPER, is described in an article to be published in the March issue of Behavioural Science. The service is available to any of you if you write to me at the Clarke Institute, 250 College St., Toronto.)

All other automated test procedures deal with only a single test, such as the MMPI, or the 16PF, or the Strong. CAPER is unique because it is a fairly complete psychological assessment by itself. It consists of *several* tests, including conventional measures of intelligence, personality, demographic data, and background variables. The CAPER battery requires six to seven hours of the patient's time. In addition, we administer other tests that require approximately the same amount of time. These include projective tests such as the Rorschach and TAT, and other inventories such as the Strong Vocational Interest test and the Terman-Miles measure of masculinity-femininity. It is a milestone of some sort that with gender patients one should administer both the male *and* female forms of some of the tests. For example, on the female form of the Strong, many male gender patients score high on the Housewife Scale. These patients often are on welfare. Basically they wish to be supported by a husband instead of working. It comes as no surprise to any of us that transsexuals are perhaps the most "un-liberated" group in our society. The male-to-female variety generally scores in the very feminine range on the Terman-Miles, perhaps the best standardized measure of masculinity-femininity available. The main virtue of this measure is that it has performance aspects to

it, and these render the test much less susceptible to the type of faking that can occur on "true-false" or self-report items.

I am going to report briefly on an MMPI pattern that seems to be emerging among our male transsexuals. It is based on a comparison of male gender patients who have cross-dressed very frequently with those who have cross-dressed infrequently. In MMPI parlance it is a 5-4 or a 5-1 pattern, that is, highest elevation on femininity, and next highest on psychopathic personality or depression, with no other significant elevations. It comes as no surprise that many of these patients have a history that is usually described as "anti-social." The pattern also includes the three validating scales (measuring "fake-good" and "fake-bad"); these are in the normal range, with no peak on F, the "fake bad" measure. That is the validity measures L, F, and K show a straight line pattern basically.

Diana shows the 5-4 pattern, high feminine, high psychopath, and the straight-line validity pattern. She prostituted before surgery and admits that she is still doing it post-surgically. Otherwise, she has made a good adjustment and is happy. We have many examples of this test pattern. Michele was operated on only recently, and feels very good about the transformation. She shows an elevation on femininity only, and again the straight-line pattern on L, F, and K. She cross-dressed regularly prior to surgery and is now very happy with her marital partner.

Larry was considered to be an effeminate homosexual. He had cross-dressed only at parties and on weekends and had never lived as a female, yet he desired surgery. His MMPI pattern is very different; the highest elevation is on depression, next on femininity, next on anxiety (Pt), and finally other neurotic features are represented. The validity measures show a distinct peak on F, which is not characteristic of our frequent cross-dressers. We rejected Larry for surgery.

Eugene was diagnosed as a schizophrenic before he came to us. He has cross-dressed only a few times. His MMPI pattern is very disturbed, with the highest elevation on the Schizophrenia Scale and again the peak on F among the validity scales.

John was married at one time and had cross-dressed only partially and in private. His MMPI shows multiple elevations, with the highest on depression and next highest on anxiety. The peak on F is present. John lost his interest in surgery.

Donna is interesting because her pattern is identical to that of the frequent cross-dressing group, yet she had actually cross-dressed only sporadically. She shows the highest elevation on femininity, next on depression, and finally the straight-line pattern on the validity scales. In Donna's case the MMPI seemed to be a harbinger of the future. Donna soon started cross-dressing every day in public. Her daily behavior and her MMPI

pattern are now back in "harmony" with each other.

The above findings must be considered tentative. We have not analyzed our data systematically as yet. However, we have some interesting preliminary results. When we compute a step-wise discriminant function analysis on MMPI patterns among several sex deviate groups we find that the 5-4 pattern (femininity and psychopathy) characterizes several "homosexual" groups. It is most common in exclusive male homosexuals, less common in bisexuals, and least in homosexual pedophiles. This pattern seems to find its *highest* concentration in male *transsexuals.* This supports other growing impressions and findings that the male transsexual is an extreme variety of the effeminate homosexual.

Three Years of Ongoing Psychotherapy of a Transsexual Patient

Helen N. Roth, P.S.W.

I would like to present some case material from a male transsexual patient who was seen for about three years in general outpatient psychiatric clinic at the Langley Porter Neuropsychiatric Institute. This case might be of interest because the patient made some very interesting changes during the time I saw her, and clinical material of long-term work with transsexual patients is rare. Her changes continued at such a strong and fast rate that I have almost not been able to keep up with them. In essence, she almost totally reversed positions from a literal kind of do-or-die insistence on conversion surgery to the contention that surgery could do nothing but produce a facade of femininity for her. She has changed from an initial statement that "Surgery or not, I am a woman," to the position that the whole idea of transsexualism is absurd and impossible. In essence, she is saying, "You cannot turn a man into a woman."

This is not to say that in any sense she is cured of her transsexual problem, because in losing her feminine identity, there has been absolutely no reemergence in any sense of masculinity. I think that psychologically, her statement that "If you held a gun to my head, I could not be a man," probably is as true now as it was three years ago. She came to us at the age of 35 after she had made a particularly bloody self-destructive attempt on her life following a violent quarrel with a roommate. She wanted help because she realized the suicidal implications of her behavior and the repetitive nature of interpersonal problems.

Our contract for treatment was focused strictly around these problems, and there was no intention whatever on my part at any kind of gender reorientation for the following reasons: (1) the literature said it was impossible;

(2) the patient was so emotionally upset that this did not seem to be appropriate; and (3) my own reaction to her from the first moment I saw her was as to a woman. There was never really any feeling about her as a man in my own mind. She had at this point been living in the role of a woman for a number of years. She had undergone electrolysis (self course of electrolysis) and considerable feminizing surgery to both her face and body, so that she really looked somewhat bizarrely, but nevertheless, female-female. Even more striking than her appearance was her manner, which was to me totally feminine. In the three years I have known her, in spite of the most tremendous stresses, there has never been any deviation from this feminine pattern of behavior.

I have wondered about my own objectivity in seeing her, but my feelings were confirmed recently when she was seen by one of our most experienced and sophisticated psychologists. He said he had never seen a more feminine transsexual, nor a more ambivalent one. For her own part, she seemed to sense that I believed in her as a woman. She often said to me during the first two years, "It is your belief in me that makes it possible for me to continue coming."

Her adult history and her initial presentation of herself seemed to follow along the lines described in the literature. She said that she had always been a girl but had sought compliance with the role socially assigned to her, until utter desperation finally led her to assume female dress and life in the female role. I think this was about four years before I first saw her. Her family history, such as she would reveal, pointed to a severely inhibited, repressed, isolated and alienated childhood.

In the first two years of treatment, we communicated at first only through the medium of her reading journals to me during a ritual of afternoon tea. It became clear that she was indeed very severely disturbed and probably a borderline patient. I want to comment on just two things about her personality. The first was her extreme psychological and social immaturity. She initially behaved like a seductive hysterical female, but it soon became clear that her real goal and intent in life was to make her father love, accept, and take care of her as his own little girl. What she wanted from me was to be a mother and tell her about all the things her mother never told her. I think, as I studied her over the years, that a lot of her behavior could be understood on the level of a three- or four-year-old child. Her conceptual thinking, her logic, and particularly her sense of humor, were like that of a rather normal three- or four-year-old. I often worked with her on those terms.

A second significant aspect of her personality was her extreme lack of socialization. In one way she threw herself into relationships, but if the recipient was anything less than fully accepting, her relationship fell to ruins. She was hostile. She was arrogant. She was grandiose. She could see no reason

why she could not take what she wanted, why she should follow rules meant for others, or why anyone should think she had anything in common with anybody else (including other transsexuals, whom she hated as much as she hated everybody else). It became clear after a while that as these defenses began to crumble, she really began to question herself more and more, and the self doubts began to break through. It also became clear that she relied very heavily on drugs and alcohol to seal off her tension and her guilt, which she could not verbalize at this point at all.

A marked change took place after two years, following four weeks of vacation. The patient had been put on low dosages of medication, and when I came back, she was dramatically changed. She had become quiet and more subdued, but seemed much more mature, much more in touch with the real world. She had found a job. She was saving money for the first time in her life. She was following rules and regulations, and all the boring normal routines of life. She was postponing gratifications, controlling her temper, and making plans to be evaluated for sex reassignment surgery here at Stanford.

Along with this came gradually an increasing sense of depression, apathy, and withdrawal. There was not any kind of verbalization of what this was all about, except that she was giving up her fantasy world and was now living more in the real world. Finally, after a particularly silent session, she came to see me. She said that the night before, she had watched some old movie like "Some Like It Hot," where male actors had assumed female dress. She thought that it was grotesque and wondered for the first time, "My God, do other people see me in these terms?"

From then on, she became increasingly anxious, insecure and afraid that people would read her. She began to say that she did not know what it was like to be a woman. She said she had never felt like a woman and asked me what it felt like. She continued to observe other women on television.

I was taken aback. I did not understand it, and told her, "You know what it is like to be a woman. You have always felt like a woman."

She said, "No, when I was a child, I always wished I could be a girl. I dreamed of being a girl, but I never really believed I was a girl." Then she said, "When I assumed a feminine role, I really researched and studied the part and in essence I have conned you and otherwise charmed you into believing in me."

This third and last phase of treatment has followed much along the same lines except now she has moved away from what other people think about her to a very direct statement of her doubts about herself. The scene that she now presents is one that has been implicit all through the treatment, but has never come out this clearly before. I tried to paraphrase the way she put it a couple of weeks ago. She said,

> I have always seen the world in my own terms. I have always insisted that others see the world as I do and until now, I have never

allowed anyone to question my ideas about myself. I have never allowed myself to question my ideas about myself, but now I must go back and see how I've come to feel the way that I do. I feel stuck. I can't ever go back to feeling the way I was before, but unless someone can help me, I don't know where I go from here.

Despite her confusion, she has recently had some evaluation at Stanford for conversion surgery. I think one of the things that is very frightening to her is that the surgery would imply that she could become and was expected to become a normally active heterosexual person. She seems to be saying, "I just cannot be that, because I just do not know anything about sex. I just cannot be that intimate with anyone."

Method of Preoperative Evaluation of Transsexual Patients

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The Social Evaluation Clinic Section of the Department of Urology at Cook County Hospital, Chicago, was established in June, 1970. The purpose of the clinic is to provide brief, inexpensive, supportive treatment measures for patients suffering from a wide variety of sexual dysfunction, and to train appropriate medical personnel to recognize and treat sexual dysfunction, a problem area all too often avoided by physicians. To date the clinic has dealt with the following areas of need: vasectomies, infertility, impotence, frigidity, preventive and corrective sexual education, counseling and surgical correction of patients with congenital or acquired sexual or anatomic deformities, and counseling and surgical correction of patients requesting sex-reassignment.

Present staff includes: the Department Chairman, sexual therapist group leader, staff and resident urologists, behavioral psychological consultants, medical social worker, endocrinologist, obstetric-gynecological consultants, plastic surgeons, psychiatric consultants, students (medical and psychological) and nurses.

In September, 1971, an increasing number of patients requesting sex reassignment surgery began coming to the clinic. In the past, such surgical procedures had occasionally been performed at Cook County Hospital under the guidance of Dr. Orien Stuteville with a high measure of success. However, when our active transsexual patient load reached 32 in number, the clinic staff

became quite concerned, since the experience of others indicated a number of sex-reassignment patients had significant post-surgical problems and were moderately dissatisfied with their emotional and physical results. It was, therefore, decided to reorganize pre- and postoperative evaluation techniques and supportive services, so that outcome data could be more systematically gathered and evaluated.

At the present time our evaluation procedure is as follows: A social-medical history is taken by the clinic social worker. The medical history is taken and a complete examination is performed by the Urology resident, with all appropriate tests ordered. The patient is seen initially by the sex therapist and staff. An endocrine evaluation is performed, if possible. Unfortunately, such evaluations are probably invalid since many of our patients have been receiving hormones from outside sources prior to coming to our clinic. If initial evaluation indicates it might be beneficial, the patient is encouraged to join special group therapy sessions for transsexual patients. The patient is assigned to a behavioral consultant for individual psychological testing, which includes a traditional battery of tests (e.g., WAIS, HTP, Bender, MMPI, TAT). When testing is completed, an individualized program of interviews and preoperative evaluations with the clinic staff is set up, providing a complete program of self-inspection, education and evaluation. After a full evaluation is complete (usually two to four months), psychiatric interview and consultation is obtained. The patient is reviewed by the entire staff and either rejected, continued in counseling, or recommended for legal services and surgery.

While much research is still in progress, we feel it is possible to offer some tentative conclusions based on our experience. Our suspicion, not yet confirmed, is that most of the psychological tests which are costly and time-consuming to administer are not especially useful as predictive instruments for the success of this type of procedure.

Perhaps what is needed are simplified tests or batteries designed specifically for the transsexual patient. The transsexual patient does not fit any stereotype, but ranges from the very intelligent to the poorly educated, from the psychotic to the seemingly adjusted, from the asexual to the highly sexually-oriented individual.

It has also become apparent that the traditional psychiatric model, which assumes that all homosexual behavior is *a priori* deviant, is not adequate to explain the transsexual phenomenon.

One thing is certain, however. If meaningful answers to questions about transsexualism are to be found, more outcome research and validation studies of various test batteries need to be undertaken. Perhaps it would be possible to gather certain pre-specified information about patient populations from numerous research studies, and feed it into a computer system for common use.

A Diagnostic Survey of 23 Patients Applying for Gender Surgery

M. J. Pearson, M.D.

We started evaluating gender patients at the University of Michigan in December of 1968. At that time an article appeared by Kubie questioning the justification for the use of the diagnostic term "transsexual" as a separate entity. The article pointed out that if it were to be considered as such, it would have to be very carefully differentiated from homosexuality and transvestism. He expressed the feeling that at that point it had not been. Since this was precisely the kind of decision that we would need to be making in working with these patients, Dr. Fred Davis and I undertook a small descriptive study of the first group of 23 patients evaluated in our clinic in an effort to clarify our own thinking in this area and hopefully make some contribution to the study of this condition.

Included in this study were the first 23 patients who applied to us for gender surgery. There was no effort at preselection other than that they had to be residents of the state of Michigan to be considered by us. The evaluations of these 23 patients were done over a period of about one and one-half years and involved as little as three hours to as many as 26 hours of interviews. The majority of these patients had psychological testing and, in most cases, parents and other family members were interviewed.

Twenty-one of the patients gave a history of cross-dressing and nine of them were living full-time as members of the opposite sex at the time they were evaluated. Fourteen of the patients were already on hormone therapy at the time they were first seen by us. In general, the patients we have seen have all been from lower socioeconomic classes. In studying this group of patients, we started with the assumption that this was a group with many similarities and all would probably be either homosexual, transsexual, or transvestite. We decided to define each of these conditions as simply as possible and then apply

these definitions to each patient using the data from our initial contacts with them. Then we would proceed to study them in more detail and depth to see if subsequent data supported the initial diagnostic separations.

We defined transsexualism as the enduring conviction that one is meant to be a member of the opposite gender. We defined the transvestite as one who cross-dresses for erotic satisfaction, and we defined the homosexual as one who may cross-dress but who prefers those of the same gender as sexual objects and values his own genitals in sexual relations.

We learned very soon that these distinctions are often not at all clear nor are these decisions easily made. We therefore decided to rate each patient according to more than one definition whenever applicable, since it was our initial impression that most of these patients seemed to exhibit qualities common to more than one of our three definitions. When we had collected the evaluative data on the 23 patients, two of the psychiatrists on our team independently went over the information and impressions from the initial interview of each patient and rated each one on a scale from 0 to 6 as to the fit of these definitions. Resultant scores were collated for agreement and then plotted on a triaxial graph (Figure 1).

The three axes on this graph are the transvestite axis, the transsexual axis, and the homosexual axis. Each patient was plotted on each of these three axes. The results were then triangulated and the patient was located in the middle of the triangle. There is a dot for each patient.

What results is a graphic, if not entirely precise, way of depicting the relationship between the summation of the scores for each patient. As you will notice, we end up with 10 of the patients on the transsexual portion of the graph, 10 on the homosexual portion of the graph, and three on the transvestite portion. In effect, most of the patients tended to end up in the lower part of the graph. This suggests that transvestism was not a strong influence in our group.

There are varying numbers of circles at the point that each patient occurs, all the way from one circle to four circles. This was a subjective appraisal of what we call libidinization. We noted that some of our patients were very highly erotic in their general appearance, behavior, and dress. Other patients were much more subtle and subdued. We simply rated them on a schedule from 1 to 4; those who have the most circles are the most erotic and those who are the least erotic have the fewest circles. In general, the homosexual group tends to be more highly erotic in their general appearance than the transsexual group. There are three patients in the homosexual group with only one circle, as well as one in the transvestite group. This is the group, a subgroup really, that keeps showing up in some of the subsequent scales as different from the other homosexuals and transvestites. These patients were typically very depressed. They were not feminine in their appearance, and by

and large, were a very unhappy lot and seemed the least likely candidates for surgery of all of the patients in our group.

After we had tentatively labelled our 23 patients as either transsexual, transvestite or homosexual, according to our definitions, we then looked at a number of factors in both the present behavior and background to see if they would help in the differentiation of these three groups. Specifically, we looked at family background, heterosexual activity, homosexual activity, attitude toward genitals, reliability as an historian, social adaptation, work adjustment, as well as the absence or presence of other psychiatric diagnoses. It is our impression that the data from a number of these areas contribute to the differentiation of these three groups.

The first area we will look at is reliability as an historian (Figure 2A). As has been pointed out by a number of investigators this is an area where gender patients typically have problems. Our evaluation of this area was based both on subjective impressions and objective data. In 21 of the 23 patients, we did have some objective, outside data to refer to, including interviews with other family members, school records, psychiatric evaluations done elsewhere, and records of old hospitalizations. In general the transsexuals (T) tended to be more reliable as historians than the other two groups. It is even more interesting if we look at the six patients in the two most reliable categories among the transvestites (V) and homosexuals (H). Five of these six were judged to be having major problems with depression. Also, this tended to be the same group who were judged to display a very low level of libidinization, as shown on Figure 1. In other words, the least effeminate ones in these two categories tended to be the most reliable. The same was not true among the transsexuals.

In the second part of the figure (2B), we have social adaptation. This is an evaluation of the individual's capacity to form friendships and the kind of friendships that he has formed. It was our impression that none of our patients were doing very well in this area. However, this is not very surprising in view of the fact that they were all seeking gender surgery, suggesting that they all must in some way have been pretty unhappy with the way their life was going. Again, there does seem to be some difference between the transsexual group and the other two groups in that they were definitely judged to have formed better and healthier relationships.

In the final part of the figure (2C) we have work adjustment. The factors that went into evaluating work adjustment were length of time on the job, promotions, and use of sick time. Again, the transsexuals tend to score somewhat better in this area than the other two groups, although, interestingly enough, the two transsexuals who were rated as having excellent work adjustment were both biologic females. There is quite a dichotomy in the homosexual group, with some having poor work adjustments and another group having good work adjustment. This dichotomy is based on the same split

in this group which we have noted before. Three of the four homosexuals with good work adjustments were non-feminine homosexuals, and all four of them were the ones that I have mentioned before as being judged to be quite depressed individuals.

In the next figure (Figure 3), the first section (A) deals with heterosexual activity, both in the past and at the time of evaluation. As far as sexual activity in general, both heterosexual and homosexual, we found this the most difficult area in which to determine reliability. Most of the transsexuals had never had heterosexual experiences; those who had seemed to have tried it as a cure, uniformly found it unsatisfactory and gave it up rather quickly (unless they happen to marry as part of their effort to "cure their problem"). The transsexuals at the time of evaluation were uniformly free of any heterosexual activity, which was not entirely true of the other two groups.

Again, homosexual activity (Figure 3B) is an area difficult to evaluate. The transsexuals as a group tended not to consider this type of activity as homosexual. Typically, they described preferring sexual relationships with a so-called "straight," non-homosexual male. I think the most important thing to note is that among transsexuals there will be considerable sexual experimentation in this area, but in general, as time goes by, there is a decrease in the amount of homosexual activity. However, the opposite is true of the homosexual group. If we look under the current part of the homosexual activity, we note that there is a group of three homosexuals who are not involved in any type of sexual activity. Again, this is the group of homosexuals who are not highly libidinized and who are depressed over their homosexuality. Also, the two highly active transsexuals at the time of evaluation were both biologic females.

The third part of this figure (Figure 3C) has to do with attitude toward genitals. This relates to the patients' direct responses to questions about their genitals as well as the use of their genitals in any kind of sexual activity, including masturbation. The three transsexuals who made completely indifferent statements about their genitals were the biologic females. All the other transsexuals, except one, were not using their genitals in sexual behavior, and their comments about their genitals were negative to varying degrees. The one transsexual who was given a +1 rating in this area was doing some infrequent masturbation. Once again we see the rather marked dichotomy in the homosexual group; of the five homosexuals who gave highly negative responses and claimed not to be using their own genitals in sexual behavior, three were in our low libido, depressed group.

I do not think the findings in this particular area are very surprising in view of the fact that the attitude toward genitals was part of our original definition of both the transsexual and homosexual groups. However, they are interesting since all of these patients were placed in a diagnostic category after

the first diagnostic interview, and data from subsequent interviews did little to alter the initial impressions.

The next figure (Figure 4) deals with other psychiatric diagnoses given to this group of 23 patients. (If you look over the total column, you will note this comes to 22. This does not mean that 22 of the 23 patients were given other psychiatric diagnoses, since a number of them had two separate diagnoses.) As far as separating out the transsexuals from the other two groups, I think the important thing to note is that all transvestites and homosexuals have at least one other diagnosis, whereas six of the 10 transsexuals had no other diagnosis. Also of interest is the fact that there were no patients judged to be psychotic in this group, although nine of the 23 were judged to be quite borderline in their adjustments. These include schizoid personalities, of which there were five: explosive personality; the two inadequate personalities; and one paranoid personality. Of the nine who had been considered to be borderline, five were homosexuals, two transvestites, and two transsexuals. Of the two transsexuals who were depressed, both were judged to be reactive depressions. One individual was married and as a result found himself in a bind from which he could see no way out; the other had been successfully living a cross-gender existence for a number of years and had been accidentally found out. The four depressed homosexuals and one depressed transvestite constitute the group I have previously referred to, which tended to be non-feminine and frequently had quite different scores on the various scales than the other members of these groups.

The final figure (Figure 5) has to do with factors from childhood. These factors come from only 21 of our 23 patients. We did not include two of the patients, because we were unable to obtain outside information to corroborate the patient's subjective impressions. The histories from these two patients were judged to be so unreliable as not to be of much value.

The first part of this figure deals with whether the basic family unit was intact or not until the patients were 12 years of age. In the transvestite and transsexual groups, the nuclear family was about as likely to be intact as not intact, with the homosexual more often coming from intact family units. We then divided the patients according to whether they came from what we judged to be conflict-free family units, as opposed to conflicted family units. (Since no family is without conflict, perhaps strife would have been a better term to use here.) To be considered a conflicted family unit, the family would have to exhibit some very profound conflict. Other examples would be alcoholism in either parent, and as in two of our patients, parents who were clearly psychotic and very threatening. Of the five alcoholics, all were fathers and four of the five were brutal when drunk. The two psychotic parents, both fathers, were quite violent individuals. Also, under family units without major conflict, we have a number of subheadings. Three of our patients came from quite

comfortable family backgrounds; however, all three were born out of wedlock and at no time in their early life was a father present. All three were raised by grandmothers. Another patient was abandoned by his mother just under six months of age and given by the father to an aunt and uncle to raise in what is described as a fairly comfortable home. Two more patients came from what seemed to be not only intact, but fairly healthy, families. However, both of these patients were raised as the opposite gender. Finally, four of our patients came from the kind of background described by Stoller, where there seems to be relatively little conflict, but at the same time a very close, over-invested relationship with the mother and a remote or psychologically absent father.

Each number in the middle part of the figure represents one patient, except in the transsexual column under conflict, where one patient appears twice. This was a patient who had an alcoholic father and whose parents were divorced prior to age 12. (That is why if you add up the transsexuals we come out to 11. We are one short in both the homosexual and transvestite columns in our totals because the two patients deleted occurred here.) I think the important thing to note is that conflict, of the type we describe, is much more likely to occur in the background of a homosexual patient. On the other hand, transsexual patients, although frequently in distorted family units, are much more likely to be raised in a family free of major conflict.

I think this is even more significant if we note that three of the four numbers in the transsexual column under conflict occurred in biologic females. The only biologic male transsexual in this area experienced divorce prior to age 12. (This patient probably should be placed in the conflict free column under close mother and remote father, as this was the situation throughout his childhood until the time of the divorce at nine years of age.)

The final part of this figure deals with the history of cross-dressing in childhood prior to age 12. I think the differences in these groups is obvious here and certainly not unexpected. The two transsexuals who did not give a history of cross-dressing prior to age 12 were both raised in a very rigid family environment where they had very little opportunity for any kind of acting out. Interestingly enough, however, both describe active fantasies dealing with cross-dressing going back quite early in childhood.

It is our conclusion that this study supports the idea of transsexualism as a clear and separate diagnostic entity. We have started with a fairly simple and straightforward definition of transsexualism and applied this diagnosis on the basis of our initial and relatively superficial impressions. We have then studied this group of patients in more detail and found that the separation of transsexualism from homosexuality is not only supported, but reinforced, by the collection of more detailed social-historical data. This differentiation between these groups is even more clear-cut if we separate off part of our homosexual group. On initial contact, the effeminate and acting-out

homosexual is the most difficult to separate from the transsexual. On the basis of our data, however, it is this group that would seem most clearly separate from the transsexual. This group of homosexuals seems more highly libidinized in their general appearance, are less reliable as historians, form less stable interpersonal relationships, are less likely to have stable work histories and tend to show a history of increasing homosexual activity, as compared to a decrease in this type of activity by the transsexual. In addition, this group of homosexuals is much more likely to exhibit other forms of psychopathology. Although both groups show distortions in their nuclear families, the homosexual group is much more likely to have experienced a stressful and conflict-ridden childhood and is much less likely to have cross-dressed in childhood.

I would feel that the relatively small number of patients in our study and the subjective nature of some of our judgments would suggest that our findings at this point should be considered rather tentative.

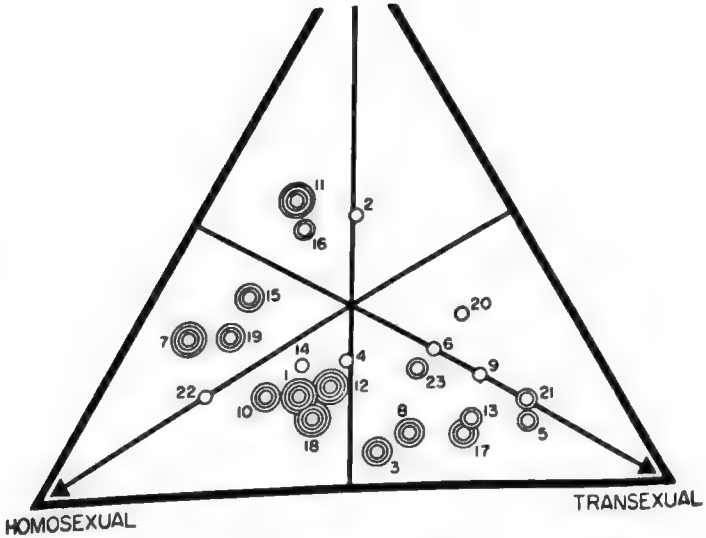

Figure 1.

RELIABILITY AS HISTORIAN	Total	V	H	T
HIGHLY UNRELIABLE	6	0	5	1
MODERATELY UNRELIABLE	4	2	0	2
MODERATELY RELIABLE	8	0	3	5
HIGHLY RELIABLE	5	1	2	2
		3	10	10

GENERAL ADAPTATION	Total	V	H	T
POOR (Superficial friendships distant, schizoid)	11	2	8	1
FAIR	9	1	2	6
GOOD	3	0	0	3
EXCELLENT (Warm, mature, stable friendships)	0	0	0	0
		3	10	10

WORK ADJUSTMENT	Total	V	H	T
POOR	6	1	5	0
FAIR	4	0	1	3
GOOD	11	2	4	5
EXCELLENT	2	0	0	2
		3	10	10

Figure 2.

[illegible] ACTIVITY	Current				Past			
	Total	V	H	T	Total	V	H	T
NEVER	18	0	0	10	11	0	5	6
RARE	4	3	1	0	5	0	4	1
MODERATE	1	0	1	0	5	3	0	2
ACTIVE	0	0	0	0	2	0	1	1

[illegible] ACTIVITY	Current				Past			
	Total	V	H	T	Total	V	H	T
NEVER	8	2	3	3	6	2	2	2
RARE	3	0	0	3	1	0	1	0
MODERATE	2	0	0	2	5	0	1	4
ACTIVE	10	1	7	2	11	1	6	4

ATTITUDE TO GENITALS	Total	V	H	T
THREE +	1	1	0	0
TWO +	2	0	2	0
ONE +	4	1	2	1
ZERO	3	0	0	3
ONE -	4	1	1	2
TWO -	6	0	4	2
THREE -	3	0	1	2

Figure 3.

	Total	V	H	T
SCHIZOID	5	1	4	0
DEPRESSED	7	1	4	2
HYSTERICAL PERSONALITY	4	0	3	1
EXPLOSIVE PERSONALITY	1	0	1	0
INADEQUATE PERSONALITY	2	1	0	1
PARANOID PERSONALITY	1	0	0	1
SOCIOPATH	2	1	0	1

Figure 4.

FACTORS FROM CHILDHOOD	V	H	T
INTACT FAMILY UNIT	1	6	5
FAMILY UNIT NOT INTACT	1	3	5
CONFLICTED FAMILY UNIT			
DIVORCE PRIOR TO AGE 12	1	2	2
ALCOHOLIC FATHERS	1	3	1
PSYCHOTIC BRUTAL FATHERS	0	1	1
TOTALS	2	6	4
FAMILY UNIT WITHOUT MAJOR CONFLICT			
NO FATHER	0	0	3
ABANDONED BY MOTHER BEFORE 6 MONTHS RAISED BY AUNT AND UNCLE	0	1	0
INTACT, APPARENTLY HEALTHY FAMILY RAISED AS OPPOSITE GENDER	0	0	2
CLOSE MOTHER, REMOTE OR PSYCHOLOGICALLY ABSENT FATHER	0	2	2
TOTALS	0	3	7
CLEAR HISTORY OF CROSS DRESSING IN CHILDHOOD	1	3	8

Figure 5.

V Patient Rehabilitation: Legal Aspects

Transsexuality and the Laws on Sexual Mores

Joseph C. Finney, LL.B., M.D., Ph.D.

Only recently has it become clear that transsexuals have won their struggle for recognition by law of their changed gender. Five years ago this could not have been said. A 1966 New York case[1] had been decided unfavorably for the transsexual, while two later cases[2,3] have granted the transsexual's request. All three cases dealt with strictly limited legal issues and need not be read in conflict, but the generous dicta thrown in show a strong trend to allow reclassification of legal gender. Law review articles, at first cautious,[4] became supportive of transsexual change[5] and, most recently, emotionally polemic for it.[6]

The law, heretofore, not only in our common law tradition but perhaps in all societies of the world, has made certain basic assumptions and accepted certain principles as axiomatic. These are: (1) All persons are classified by gender; (2) The classification is into categories. Each category has a sharply defined boundary. A person is either assigned to a category or not assigned to it. It is not a continuum; there is no gradation; (3) One's social or legal gender is determined by one's anatomical sex. There is a one-to-one correspondence of gender and sex; (4) There are only two categories, genders, or sexes: male and female[7]; (5) Nobody is unclassified, and nobody has dual status. At a given point in time, every person is a member of one and only one category (or gender or sex); (6) Certain rights of a person, and corresponding duties of another person, certain privileges of a person, and corresponding restrictions (no-rights) of another person, depend on the gender of the parties. Thus, marriage may be restricted to persons of opposite sex gender; duties of husband to wife may differ from duties of wife to husband; inheritance and other property rights may differ; and the sanctions for sexual acts may depend on whether the couple consists of two males, two females, or one of each.

Indeed, classification by gender would be pointless if one's membership in a category did not make some difference in what he could or could not do; (7) Assignment of a person to a category is made not by the person's own choice, but by decision of an authority based on finding of fact of the anatomical sex (see point 3). In the rare case in which the facts are disputed, as may happen when the anatomy is ambiguous, the issue is decided by a court (or whatever agency the society has erected to resolve disputes about fact); (8) No person may change gender back and forth, nor even change once. A person's biological sex is assumed to be a fact that is determined at the beginning of his life and does not change. Since legal gender is determined by biological fact, legal gender should not change, either. No court can decide that a person was previously classified in error, and correct the error.

It is true that some societies have recognized special sex roles. The East Polynesians, for example, have a role of *maahuu*, a homosexual male, recognized and permitted. An Amerindian group has a role of berdache, a male who does female work and for certain purposes is considered female. These roles, too, are usually categorical and discrete. A person either is a *maahuu* or is not, with no gradation between (except perhaps for a young man in the process of being selected for that role). We need not decide whether some of these roles may constitute separate genders or not, in contradiction to Axiom 4.

Now, along comes a male in our society who asks to be reclassified as a female. He has been classified as a male all his life, and anatomically his organs are male. He desires to wear female clothing and to pass as a female. In some cases, he is willing or even eager to have surgical and hormonal treatment to change his gross anatomical appearance to female (we call such a case transsexual). In other cases he is not. In either case, what problems does he pose to the axioms?

Abolition of any one or more of the eight axioms will support the transsexual's request. So it is not surprising that attorneys for transsexuals (and law reviewers) have examined all the eight axioms. In collapsing them a little, we may note six propositions that have been urged: (a) Being male or female is a gradation or continuum and not a set of two (or more) categories (against Axiom 2); (b) There is no need to classify people by sex or gender (against Axioms 1 and 6); (c) A person has the right to choose for himself whether he is male or female (against Axiom 7); (d) A person at a given time may be both male and female, or perhaps male for some purposes and female for others, and perhaps enjoy some of the advantages of both (against Axiom 5); (e) A person may change back and forth in gender from time to time (against Axiom 8); (f) A person may be anatomically male and yet be classified legally as female (against Axiom 3).

Acceptance of any one or more of these propositions (and abandoning the corresponding axiom) would not only grant the transsexual's wish but also

open the door to other changes in our society's rules, and perhaps to a great liberalization of the mores of sexual behavior. ("The instant matter presents problems of immense proportions, not only from a medicolegal viewpoint, but especially as it affects our society as a whole."[2]) So, the courts have rejected all the challenging propositions and have reaffirmed all the axioms. Yet while doing so, some courts and some legislatures have found ways to gratify the wish of the male transsexual to be accepted as female. How have they been able to do so?

The first point to note is that the courts have become willing to modify Axiom 8. While still rejecting the notion that a person could be allowed to change his category (and presumably his role behavior) back and forth, the courts have become willing to allow him one change in gender—provided that it is irrevocable. The courts have said that they will allow a change in legal gender from male to female only after the male organs have been removed, *i.e.*, only when the judge can feel sure that the individual will never again be able to function sexually as a male.

The second point to note is that the courts have been able to redefine Axiom 3. While still saying that a person's gender is determined by biological facts, by the anatomy of his sex organs, the modern courts have become willing to say that the crucial fact is the gross anatomy *after* surgery. (Judge Ormond in England rejected this definitional change in *Corbett v. Corbett*, and that was the basis of his decision that April Ashley was still a male.) Actually, the point of view that has been advanced by Judge Pecora[2] and will probably prevail, is that two elements must be present before a male can be legally reclassified as a female: his male organs must be totally and irrevocably removed, and he must be psychologically female and wish to be classified as a female. The second element is required, of course, to prevent the involuntary reclassification of an injured man.

Judge Evans[3] specifically left open the possibility that a postsurgical transsexual, while legally female for some purposes (name change and presumably marriage), might remain legally male for other purposes (including Social Security benefits and life insurance rates). This dual status would violate Axiom 5. But no support for the position has arisen.

Other legal problems, feared a few years ago, have vanished. No American surgeon has been prosecuted for mayhem because of transsexual surgery, and it seems clear that none will be.

Therefore, it appears now that by legislation in a few states and court decisions in others, the formerly male transsexual—after surgery—can be reclassified as a female and marry a male. The authorities have become willing to permit it because they have been persuaded it is no threat to the social order or the prevailing mores. The resulting marriage may be biologically homosexual, but to all appearances it is heterosexual, so it gives rise to no

scandal and gives no public encouragement to homosexuality. The least bothersome thing the courts can do, then, is to redefine the person as female and thus deny that any breach of the moral code has occurred.

Still, this is a bending, at least, of axioms 3 and 8. One cannot say whether more is to come. Courts almost never overrule a previously settled principle—they only make exceptions to it. This is called erosion. Much later, when the rule has been riddled with exceptions, it is quietly abandoned. At this time it is difficult to say whether the acceptance of legal sex-change and gender-change for transsexuals will remain an isolated, encapsulated exception or not.

After male to female surgery, then, it seems that the transsexual can be free of legal problems. Before surgery, or without surgery, this is not so. Courts still frown on men who disguise themselves as women and pass as women. Three such sets of people can be mentioned: 1) Men who disguise themselves as women occasionally; 2) Men who permanently dress as women and wish to be categorized permanently, legally and socially as female in gender, but without removal of their male organs; and 3) Transsexuals before their surgery. (For that period of time the only thing that distinguishes them from set 2 is their intention to have surgery.) The judges (reflecting the feelings of other men and women in our culture) feel threatened and annoyed by the existence and behavior of all three sets, all of whom are technically transvestites.

In many states, perhaps all, a transvestite commits a misdemeanor whenever he uses the women's rest room. In some states, wearing a disguise is itself a misdemeanor. The practical effect of such statutes is not always clear, as courts may variously interpret a provision requiring proof that the disguise was with intent to defraud or injure someone.

Legally, therefore, the transsexual would be safer in dressing in his anatomical sex before surgery, and only changing dress after surgery. But the more cautious and reputable surgeons, especially those as university hospitals, will not operate under those conditions. It is customary to require the transsexual to live, dress, and pass as a member of the desired sex for six or 12 months *before* the surgery. The reason for this cautious requirement is clear: to make sure that the transsexual knows what he is getting into. No surgeon wants to do an irrevocable operation on a patient who will regret it later. The best legal advice to a transvestite or a preoperative transsexual, is to live in a state that has no disguise law and use the rest room at home.

Our legal and social concern about rest rooms is interesting, because in Japan and some other places the men and women use the same rest rooms.

One final point. You may have noted that I have spoken only of the male transsexual who wishes to become female, and not of the female transsexual who wishes to become male. In doing so, I have reflected the court cases and the public interest and concern. People are alarmed at the thought of a man

disguised as a woman. Nobody is alarmed at the thought of a woman disguised as a man. Such a thought may be amusing or even ludicrous, but not alarming. But a man disguised as a woman is regarded as a danger, like the proverbial wolf in sheep's clothing.

Judges and law review authors have alluded to the danger as obvious, without telling us what danger they have in mind. Some seem to imply a fear that a disguised male, after using his female appearance to enter where males are excluded, may then switch roles and rape or seduce a woman whose guard is down. Others seem to fear that a male disguised as a female may entice some unsuspecting young man into a sex relation that turns out to be homosexual. Either way, the fear rests on the feeling that a male organ is dangerous—a danger to women and a danger to other men, too. Despite the sporadic appearance of the vagina dentata myth, people do not seem to fear the female organ or regard it as a threat to anyone.

References

1. Anonymous v. Weiner. 270 N.Y.S. 2d, 319-324, 1966.

2. In re Anonymous. 293 N.Y.S. 834-838, 1968.

3. In re Anonymous. 314 N.Y.S. 2d, 668-670, 1970.

4. Holloway, John P. Transsexuals—their legal sex. 40 Colorado Law Review, 282-295, 1968.

5. (unsigned). Transsexuals in limbo: the search for a legal definition of sex. 31 Maryland Law Review, 236-254, 1971.

6. Smith, Douglas K. Transsexualism, sex reassignment surgery and the law. 56 Cornell Law Review, 963-1009, 1971.

7. Barbara Voohies of U.C., Santa Barbara, in a paper given this year at the American Anthropological Association meeting, cites evidence from the Pokots of Kenya, the Navahos, and the Mojave Indians, that gender categories are not always dichotomous nor mutually exclusive. Certainly people in our own culture differ in considering homosexuality to be dichotomous, trichotomous (with a "bisexual" category), or continuous. But most people in our culture use only two genders, considering male homosexuals male, and Lesbians female in gender, despite their deviant behavior. It seems to me an open question whether in all cultures there may

be two basic gender categories underlying a greater number of social roles and behavioral categories.

8. *Corbett v. Corbett* (otherwise Ashley), 2 W.L.R. 1036, 2 All E.R. 33, 1970.

Legal Aspects of Transsexualism

David Clayton, LL.B.

As in all practical matters, one of the things which you have to realize is that basically there are no rules. That is, there are no definite rules or precedents that govern what is going to happen when a transsexual wants to take legal action. The legal practices and precedents vary from day to day. When I first started working with transsexual patients, I was with the Antipoverty Program. In order to help them begin their identity in a new sex, we would arrange to have them obtain a California driver's license showing pictures identifying them as the sex they presently were (after the sex-change operation). We had quite a hassle with the Department of Motor Vehicles for a period of time, until there had been enough individuals in the program for the Department of Motor Vehicles to gain experience in dealing with transsexuals. Then, when someone came up and said "I am a transsexual," they had a special clerk who knew what transsexuals were and how to handle their requests. They even developed a form, so that a transsexual could go in and get a new driver's license with a minimum of hassle at the San Francisco office of the DMV. However, I am sure that if a transsexual had gone to an office over in one of the more rural counties in central California or the valley, the reaction would have been much different. "What is a transsexual and who are you and what are you doing and are you trying to pull something on somebody? Go some place else; we don't have a rule or a regulation in our book that covers that."

Unfortunately, it appears that the San Francisco Department of Motor Vehicles has recently regressed in its policy concerning transsexuals. I had a transsexual in the office a couple of months ago who went to the Department of Motor Vehicles office. The patient was told that the department had changed its policy and was no longer issuing such licenses at that time. At the moment, I do not know what the situation is in California. This type of thing also happened with passports. At one time a transsexual had little difficulty in

obtaining a passport. Later, a transsexual appeared at the passport office and was told that there was a directive from Washington to no longer issue such passports. The directive specified that all passports should be issued reflecting the sex exactly as it was on the birth certificate.

We have no definite rules concerning transsexuals. The rules are changing constantly. We were pointing out a minute ago that when a judge makes a decision it is frequently based upon, in some part, his own ease with his sexuality, and what sexual hang-ups he has. His decisions are also affected by what his knowledge is in the field. He may be totally at ease with his own sexuality, but very poorly informed about what transsexuals are and what the transsexual phenomenon is. Sometimes, through education, a judge can be sufficiently enlightened to begin to hand down intelligent decisions.

A name change is a very important thing to any transsexual, and the court's handling of these also varies from time to time. For example, when a transsexual went into the program five years ago in San Francisco, we could go in with verification from the doctor handling the case and almost immediately the judge would hand down a decision changing the individual's name to correctly reflect gender. However, once I received a call from the judge two hours later, asking that I please come back to the courtroom. It happened that at that particular name-change hearing, there was a vice squad officer in the courtroom who recognized the individual and had arrested her at one time for prostitution. He had gone in, talked to the judge and convinced him that this individual was trying to change her name for purposes of committing a fraud, which is the only basis on which you can deny a name change in California. The judge called us back and said that he had changed his mind, that he was going to deny the petition, but dismiss it without prejudice so that we could take the case to some other judge. I went to another judge who had been very favorable in these instances before. He said he was very sorry, but the last time he had authorized a name change an enterprising reporter had written an item about it in the newspaper. Since it had been a source of great embarrassment to him, he was not going to handle any more name changes. Later, the Superior Court judges had a session to talk specifically about this issue. They decided that in San Francisco they would no longer grant preoperative name changes. However I believe they will grant postoperative name changes at the present time.

Whether these areas are a problem to the individual transsexual or not depends upon two things. The first is how important the transsexual feels it is personally. In other words, is it important to the individual to have a driver's license that says he is the sex he feels he is, and his name is the name he feels he should have? The other factor is usually related to the socioeconomic status of the individual. It becomes much more important if you are in a lower socioeconomic level—where you are more likely to run into contact with the

police department, harassment from the police department or questions from the police department—to have something like a driver's license, that identifies you as the person that you are. When a number of transsexuals first began to appear in the San Francisco area five or six years ago, there were quite a few arrests for cross-dressing and impersonation. Currently, I do not think this is much of a problem in the immediate vicinity of San Francisco. I am not saying that there are not any arrests, or that the arrests are not listed as such, but most charges are dismissed.

Some states take a very practical attitude. They will make name changes and also amend birth certificates to indicate the new sex designation and the new name. Most states do not go that far at the present time. A small minority of states require a formal court order before proceeding at all. California is within this minority and requires that you go through a court proceeding to obtain a name change. Also, in California, I am not aware of anyone who has persuaded the Department of Vital Statistics to show on the birth certificate that this person now has a sex other than that designated at the time of birth.

Another major area of concern legally to the transsexual is domestic relations. Is it possible for a transsexual with a new identity to validly marry? By and large, I think the answer the court comes to when faced with this issue, is no. It is possible for two individuals to go down to the licensing bureau and take out a marriage license, because the clerk behind the desk takes the visual test. If there appears to be one male and one female, the clerk will issue the license. Clerks do not make any thorough investigation or require proof of sexual identity. Besides the license, California requires some kind of solemnization in a ceremony before a judge or a minister. The judge or the minister will use the same test, look at the couple, and decide that there is a male and female person. However, even after having gone through a ceremony and establishing marriage on record, transsexuals certainly are entitled to go to court and have the record changed if they want to dissolve this union. Usually the change is made on the basis that the union was initially invalid.

Children and child custody is another area of great concern to many transsexuals who have had children prior to surgery. It is an area in which they are very much at the mercy of the judges. Many judges are prejudiced by their personal feelings. Quite frequently, they draw upon precedents in California which have determined that there may be a basis for not giving a lesbian custody of her children, or there may be a basis for not giving custody of children to someone who is living in an "immoral situation." I have had instances in which the judge has said that under these circumstances he could not possibly let the children stay with an individual who has changed sex.

We have a great many problems involving inheritance. Do transsexuals acquire from marriage the same rights of inheritance as individuals normally acquire? It is very important for transsexuals to have a valid will. Through a

valid will, they can still make their own disposition of estate, whether they are validly married or not and whether they have children validly, by adoption or by guardianship. I would venture to say that if a transsexual tried to become a guardian or adopt children—and the court knew about his transsexual history—the court would at this time deny either petition. Perhaps an enlightened judge someplace might look at it basically from the point of view of what is in the best interests of the child. This is supposed to be the criterion they utilize, but such a judge would be, I think, very rare.

There are a tremendous number of areas of discrimination as far as the transsexual is concerned. Though we are developing a body of law regarding discrimination on the basis of sex, I do not think that any of this has been applied to the transsexual. It is probably quite legal to say that "I will not hire you because you are a transsexual, or I will fire you because you are a transsexual, or I will not rent an apartment to you because you are a transsexual." I have even known a gentleman who lost his job because his employer found out that he was living with a woman who previously had been a man. There is a great deal of bias and prejudice in the community at large against the transsexual.

Up until just a few weeks ago, selective service was a very important area. I think anyone who can show he is in a transsexual program and anyone who is anticipating or has completed conversion surgery, would have no trouble being exempted from the draft. I also think it would be impossible for someone who had converted from female to male to be accepted by the military service, if he so desired. A particular area of concern to some individuals is, if they are in the military service and decide they want to go through conversion surgery and get out of the service on this basis, is this a service-connected disability? In some instances, the service has said yes, and in other instances, no. It depends again upon the doctor or the board that is making the determination upon release from the service. Having been in the service and released, is it possible to relate the transsexual condition back to the service to get veterans' benefits and have the operation performed at a veterans hospital? Again, it depends on the doctor. I have found a doctor in one veterans hospital who is very well informed and eager to help a particular individual who is a patient of his. This doctor did the necessary paperwork and pulling of strings to relate this to military service. He made arrangements for the Veterans Administration to at least share in the responsibility for it.

VI Patient Rehabilitation: Surgical Programs and Methods

A Surgical Program and Technique for Male to Female Patients

Duncan Govan, M.D.
Vincent R. Hentz, M.D.

The long-term evaluation of transsexuals following gender conversion surgery hopefully will answer the question of paramount concern to physicians investigating and treating transsexuals: Is gender conversion surgery a valid treatment for transsexuals? The assessment of long-term rehabilitation and social adjustment of the operated transsexual requires that the operative result be essentially anatomic in appearance and function. We cannot assess whether the life of the transsexual is improved through gender conversion surgery if significant genital imperfections exist as a source of postoperative problems.

The attainment of satisfactory surgical results requires careful preoperative patient selection. Our indications for surgery at Stanford University are consistent with other gender identity clinics. Successful gender conversion involves construction of female genitalia more than satisfactory in function and appearance. This means the creation of a capacious vagina. In our series we use split thickness skin grafts, retrodisplacement of the urethra, a cosmetically acceptable and pain-free perineum, well-placed donor sites for the skin graft, and careful post-operative explanation to the patient about the care of the operative site. The vagina must be large enough to permit comfortable intercourse. There should be no hair-bearing skin within the vagina, and its direction should be more superior than posterior. The most serious complications in gender conversion surgery are derived from mishandling the urethra. The meatus must be patulous, for stenosis is not long tolerated. The direction of the urinary stream must allow the patient to sit to void. The perineum must be as close to female in appearance as possible and must be free from the discomforts of a tender penile stump, scar neuromas, or poorly healed

areas of chronic granulation tissue. An anatomically accurate perineum further permits free movement of the female. Donor sites for skin grafts must be selected from sites normally covered by modern fashion. This involves using the buttocks and areas of the upper thighs. The postoperative patient has acquired a new anatomy and must learn how to care for this area. Careful explanation regarding hygiene and length of convalescence prior to intercourse is necessary.

A number of procedures are followed at Stanford in order to assure attainment of these previously mentioned parameters of successful gender conversion surgery. These include: preoperative preparation and positioning, hypotensive anesthesia, careful handling of tissues, a capacious vagina constructed with skin grafts, accurate construction of labia major and labia minor from scrotal and penile skin, a patuluous and accurately-directed urethra meatus and use of a dilating vaginal stent in the postoperative period. Hypotensive anesthesia when carefully administered will virtually eliminate most intraoperative bleeding. This offers a relatively dry field, permitting more accurate visualization of the anatomy for better dissection. This reduces the likelihood of entering the bladder, urethra, or rectum, and complications which often result from fistula formation. The Stanford technique employs a sympathetic ganglionic block, either Penthylmamion or Trimethalthane in association with Halothane anesthesia, controlled respiration, and careful patient monitoring and positioning. Systolic pressure remains between 60 and 70 mm/Hg during the key part of the operation. Pressure than is allowed to rise slowly to 80 mm/Hg at the conclusion of surgery. Skilled postoperative supervision in an acute care surrounding is imperative, as is judicious use of postoperative narcotics. Success of this operation requires use of large skin grafts and skin flaps. Both heal poorly in the face of hematoma. Hypotensive anesthesia enhances careful hemostasis, lessening the likelihood of a postoperative hematoma. By decreasing the needs for electrocoagulating large extensive bleeding points, or burying large amounts of catgut, there is less postoperative sepsis and fibrosis. The advantages far outweigh the disadvantages.

Prior to the operation, complete bowel preparation is performed. Surgery begins with the patient supine, and split thickness skin grafts of .016 to .018 inch are taken with a Reese dermatome. Approximately 50 square inches of skin are taken from the upper thigh or thighs. The patient is then placed in the lithotomy position and prepped and draped, including use of the O'Connor rectal drape and Foley catheter.

At a separate table, the previously taken split thickness skin graft is sewn dermis-side-out over a stent constructed of foam latex covered with several condoms. The stent is usually three inches in diameter and seven to eight inches in length. The graft is twisted barber pole fashion to discourage

formation of a straight line scar within the vagina. Throughout the operation, care in handling tissues is maintained. The success depends upon the creation of large skin flaps whose healing can be directly correlated with the gentleness with which these are handled. No clamps or fingers are allowed on skin edges; instead, gentle traction with sutures or skin hooks is used.

As mentioned above, the patient is in a hyperflexed lithotomy position, such as is used for a routine radical perineal prostatectomy, and appropriately prepped and draped to expose the genitalia and perineum. The O'Connor sheath is sutured in place anterior to the rectum so that one may make adequate use of the rectal finger during the dissection. A skin incision is made around the shaft of the penis one cm from the corona. This incision is then continued vertically and posteriorly along the anterior shaft of the penis and the median raphé of the scrotum to the midpoint of the perineum, where it meets with the inverted U-incision anterior to the rectum. This U-incision is made carefully to include at least two inches of skin at the maximum radius so that there will be adequate tissue for insertion into the posterior aspect of the neovagina.

In the dissection of the skin of the penis, care is taken to establish a deep plane against Buck's fascia so as to preserve all necessary blood supply to the flap.

The corpus spongiosum is easily separated from the corpora cavernosa with sharp dissection, preserving adequate length of the former for proper transposition and adequate meatotomy. The corpora cavernosa are dissected to a point where they bifurcate, at which stage they are suture-ligated separately, leaving a stump of about one cm in the midline. The corpus spongiosum is then further dissected away from the remaining corpora cavernosa so that it can drop posteriorly away from the symphysis pubis. The bulb of the urethra is left untouched in this dissection.

Following a routine orchiectomy, the perineal incision is extended through the subcutaneous tissues and the area between the prostate and rectum developed as in a routine Young-type prostatectomy. Because of the smallness of the prostate, we have had occasional difficulty with this part of the operation, particularly when identification of the recto-urethralis muscle has been less than optimal. In several instances, this dissection has led us directly beneath the longitudinal muscle layer of the internal rectal sphincter, and in two occasions the rectum has been entered. Normally, however, the space is easily developed after severance of the recto-urethralis muscle and we are able to create a space adequate for insertion of two fingers to a depth of at least five to six inches. In no instances have we had difficulty with the seminal vesicles or ureters, but on one occasion the urethra was entered in its bulbar portion. In some instances, in order to maximize the size of the neovagina, we have deliberately cut the medial fibers of the levator ani muscles with cautery.

Considerable time is then spent in electrocoagulation of all areas of the perineum and beneath the skin flaps, prior to insertion of the stent, reconstruction of the labia and perineum, and wide Z-Y plasty of the transposed urethra.

At the conclusion of the surgery, a Bonanno tube is inserted suprapubically into the previously distended bladder. This form of suprapubic drainage has proven itself to be infinitely more sterile than the indwelling urethral catheter and has obviated the possibility of pressure necrosis of the urethra between the stent and the urethral catheter.

Discussion: Donald R. Laub, M.D.

I would like to discuss three points: 1) The corpora spongiosum (periurethral) may be transferred to a position anterior to the superficial transverse perineal muscle, so that the urinary stream will be directed downward in the sitting position on the toilet. It is more natural for the urethra to be placed a little posterior to its usual "male" exit from the perineum. 2) Metal stenosis may be treated prophylactically by two large Z-plasties placed in the urethral to penile skin (labia minor) circumferential suture line. Z-plasties prevent scar contracture in this suture line, and thus meatal stenosis is obviated. A bonus of the procedure is that the sensitive urethral mucosa is everted and exposed, right in the area of the clitoris, and it can function for genital stimulation in sex. 3) Some cases of "vaginal stenosis" are really spasms or contractions of the levator ani muscles, as these muscles (male) do not necessarily atrophy under the influence of female hormone therapy. These patients may experience "marital problems" such as "frigidity," because the levator muscles may squeeze down on the vagina very tightly. With proper instruction and training, postoperative patients are able to train themselves to relax these muscles somewhat so that intercourse can take place. As an aside, the corollary to the above is that strong levator ani muscles may be a very desirable attribute for a new female in that they may be used to grasp the penis very strongly. Patients refer to this attribute as a "nipper."

* * *

In the dissection of the perineum, the superficial transverse perineal muscle is just deep to a layer of fat and directly anterior to the vaginal cavity. You can duck the corpus spongiosum and the urethra under this muscle or even place it directly through the muscle, so that the urethral orifice is situated more naturally a little bit farther posteriorly than the usual site where the "male" urethra exits from the panel. Furthermore, the patient will urinate downward when in the sitting position.

* * *

The valve on the vaginal stent is identical to the valve on the

Heyer-Schulte mammary prosthesis. If you remove air from the inside of the stent, atmospheric pressure will compress the stent to as small a size as you desire. You can add air to enlarge the device. You are able to apply suction to the innermost part of the stent also.

MALE TO FEMALE TRANSSEXUAL SURGERY EXPERIENCE

NUMBER OF PATIENTS INTERVIEWED	480
NUMBER OF PATIENTS OPERATED	45
TOTAL NUMBER OF OPERATIONS	70
TOTAL ONE-STAGE GENDER CONVERSIONS	30

Table 1. Postoperative results and complications.

COMPLICATIONS

1. ANESTHETIC	3
1 CARDIAC ARRHYTHMIA (PAT)	
2 POST-OP BLEEDING REQUIRING TRANSFUSION	

Table 2. Postoperative complications—anesthetic.

2. PSYCHIATRIC	4
1 EXCESSIVE EMOTIONAL ATTACHMENT TO PHYSICIAN	
1 SEVERE ANXIETY REACTION	
1 MODERATE DEPRESSION	
1 SUICIDE ? vs HOMOCIDE ?	

Table 3. Postoperative complications–psychiatric.

3. MAJOR SURGICAL COMPLICATIONS	5
1 RECTOVAGINAL FISTULA	
1 URETHROVAGINAL FISTULA	
3 SUFFICIENT GRAFT LOSS TO REQUIRE MAJOR SURGICAL REVISION	

Table 4. Major surgical complications.

4.	MINOR SURGICAL COMPLICATIONS	9
7	MINOR GRAFT LOSS RESULTING IN VARIABLE STENOSIS	
1	MEATAL STENOSIS	
1	URINARY TRACT INFECTION	

Table 5. Minor surgical complications.

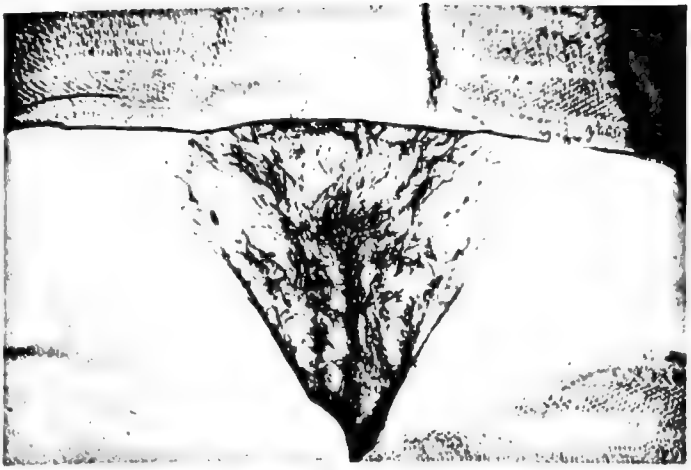

Figure 1. Postoperative results, PA view.

Figure 2. Postoperative results.

Figure 3. Postoperative results.

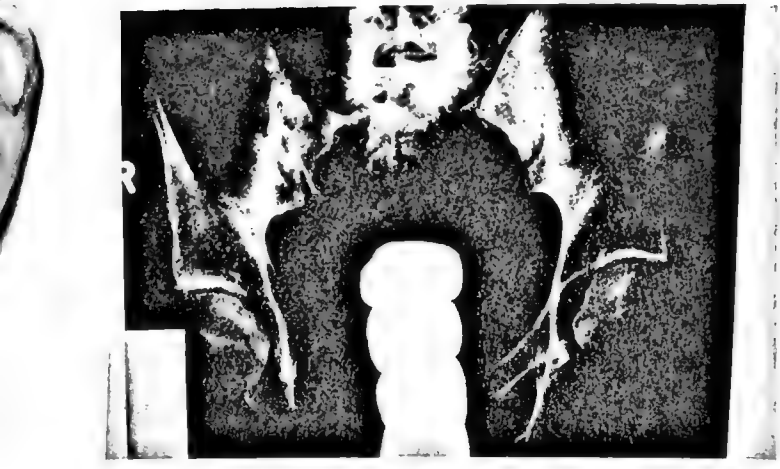

Figure 4. Radiogram showing large vagina using skin graft technique.

A New Male to Female Surgical Technique

Milton Edgerton, M.D.

Dr. John Bull and I have developed a new method of male to female surgery at the University of Virginia which does not include the use of scrotal skin flaps within the vagina. Hair follicles in the scrotum are quite large and quite deep. When they are placed within the walls of the neo-vagina, they are extremely difficult to remove, even for a skilled electrolysist. When we had patients troubled by this complication, we tried removing the hair postoperatively. It was very difficult to do. For these reasons, we will no longer use scrotal flaps within the vagina.

We would like to use ideal skin for vaginal lining, and if you are going to remove the male genitalia, the penile skin is the *very best skin donor*–whether you use it as a graft or as a flap. The question might be asked, "How do you get penile skin into the location of the vagina without dividing its pedicle?" The opening of the female vagina is located about 2.5 inches posterior to the base of the shaft of the male penis. Any operations which attempt to move this flap by any method other than the use of a posteriorly located pedicle, will encounter great difficulty in transposing a penile flap far enough posteriorly to provide a vagina. Figure 1 is a 22-year-old male transsexual musician who has been living successfully as a girl for several years. She tucks the male phallus between her legs as many of these patients make a habit of doing. We have used a flap for vaginal construction because it has several tremendous advantages. It does not contract significantly. We do not have to make these patients wear dilating molds and stents for months or years. Penile flap skin is more moist than a skin graft, reducing the need for lubrication during intercourse. We think that this new technique is an easier procedure on the patient than many procedures I have used, involving free skin grafts.

Incision is usually made in the fashion depicted in Figure 2, and the

pedicle of this tissue remains posteriorly located near the anal canal. There is a danger that the blood supply of this flap will be lost if those incisions are deepened too far posteriorly. We must protect the circulation from the lateral perineum and work rather carefully just anterior of this flap, as shown in Figure 3. We turn back the tissue at the level of Buck's fascia, and peel out the body of the phallus, saving not only the blood vessels of the penis, but also the cutaneous nerves that run in rich plexes in the subcutaneous and the subdermal tissues. It is then possible to go ahead with perineal dissection, leaving the now filleted phallic skin flap lying posteriorly (Figures 4, 5). The central tendon is divided and the dissection of a deep pocket is carried out as previously described (Figure 6).

The tubular flap is rather long; the glans of the penis is preserved and may be carried along as a flap if the tissue is not thinned excessively right beneath its tip. It later comes to simulate a small cervix and produces a very interesting effect, rather similar to the dome of a normal vagina (Figure 7).

A urological member of the surgical team does the dissection of the pocket behind the prostate. The two levator muscles lie on either side. In some patients we have ressected a small margin of each levator muscle to avoid excessive tightening, but there is possible value in having these muscles around the wall of the vagina. Indeed, some patients have told us that they thought them helpful during intercourse after surgery.

The pocket must be made quite deep. We try to get right up to the peritoneal reflection. The flap can then be inverted on itself. With the aid of the posterior pedicle, you can move the penile flap comfortably as far posteriorly as you wish. Obviously this shift is going to leave a raw area anteriorly and it is covered with a split graft until the second stage four weeks later. It has been my experience that most of the patients that I have operated on by one stage free skin graft techniques ended up requiring a second stage anyway. Thus we do not hesitate to use this two-stage method.

Figure 8 shows more clearly the inversion maneuver. The long urethra is then allowed to fold forward. A skin graft is dressed over the urethra (Figure 9) to keep the wound clean and dry in the three-week interval between. We think of this graft as a temporary biological dressing. The pedicle of the flap will become edematous. It will enlarge to two or three times its immediate post-op size if the patient is working and ambulatory between the two stages. We have had no complaints of pain, and the patients have not been troubled with significant inconvenience. I would stress that with this technique we *never* insert an elastic or resilient form that would stretch that flap. Such forms are the biggest dangers of causing skin necrosis that can be encountered. We have learned to use a simple gauze packing that becomes condensed and packed after a few hours and provides little pressure against the wall of that flap. We like to use a stent dressing and tie the dressing around the skin graft (Figure 10). The pack behind is emerging at the entrance of the neo-vagina. The point was

made earlier today that some doctors have started using suprapubic trochar drainage. I think this is an excellent technique. We have used it twice now through a trochar cystotomy. It has the great advantage of avoiding any risk of having the dressing in the new vagina cause pressure against the wall of the urethra where the Foley catheter passes under the pubic region. Such pressure has been the cause of urethro-vaginal fistulae that have been seen with some patients.

Figure 11 shows the patient back for the second stage. The dressing that the patient wears is just a cylinder of foam rubber contained within a condom. The depth of the vagina is quite deep. There is no excuse for not having adequate depth, unless a portion of the flap has sloughed. If any part of the flap is sloughed, the result is a shortened vagina. Although I have seen a post-operative necrosis in one penile flap, I have not had a slough in any of the penile flaps that I have personally done.

At the second stage we utilize all the scrotal tissue to construct the labia, but keep it outside the vagina. It is split posteriorly back as far as one needs to carry it to create two separate flaps (Figures 12, 13). The edematous excessive subcutaneous tissue can be removed. The back posterior fornix of the vagina is easily attached near the anterior wall of the anal canal with the aid of a triangular flap that leaves little opportunity for later stricture (Figure 14). The two scrotal flaps are then brought laterally around the introitus (Figures 15, 16, 17). The urethra is exposed, shortened, and fitted in an appropriate aesthetic manner. The patients recently have begun to request construction of a clitoris. The scrotal flaps that are used to make labia become quite edematous in the early period postoperatively. If they are not excessively large at this time, they will be too small later. They continue to retain a good bit of fluid, even three or four weeks later. If the patient so desires, the labial flaps can be brought forward, and folded and created to make a clitoris and hood anteriorly with an additional plastic procedure.

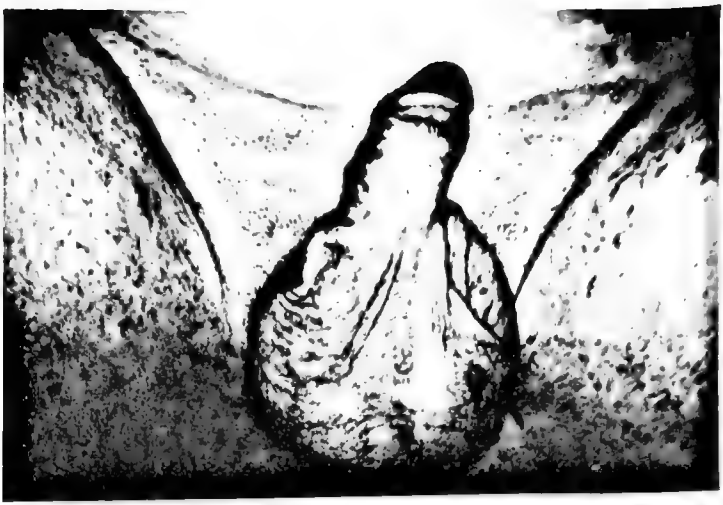

Figure 1. Preoperative view.

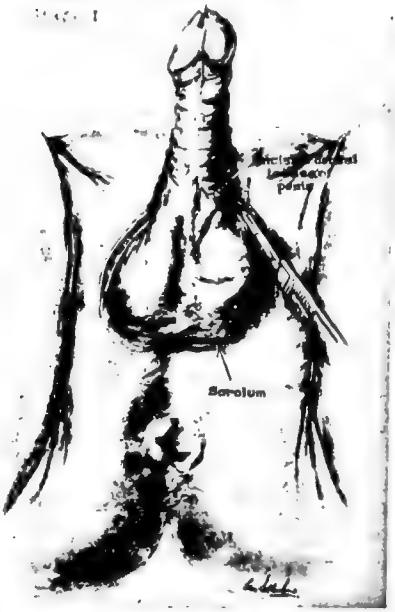

Figure 2. First stage (see text).

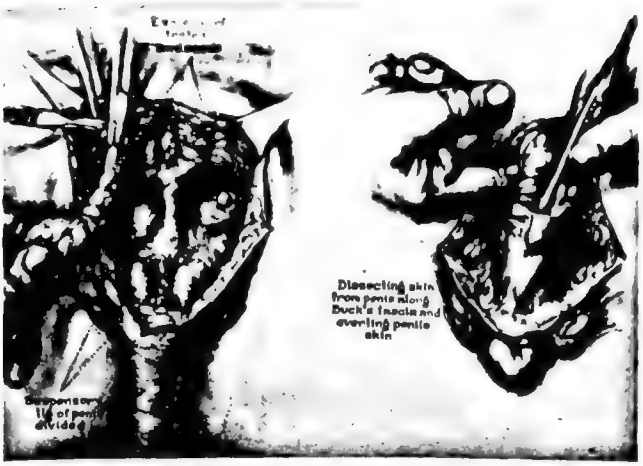

Figure 3. First stage (see text).

Figure 4. First stage (see text).

Figure 5. First stage (see text).

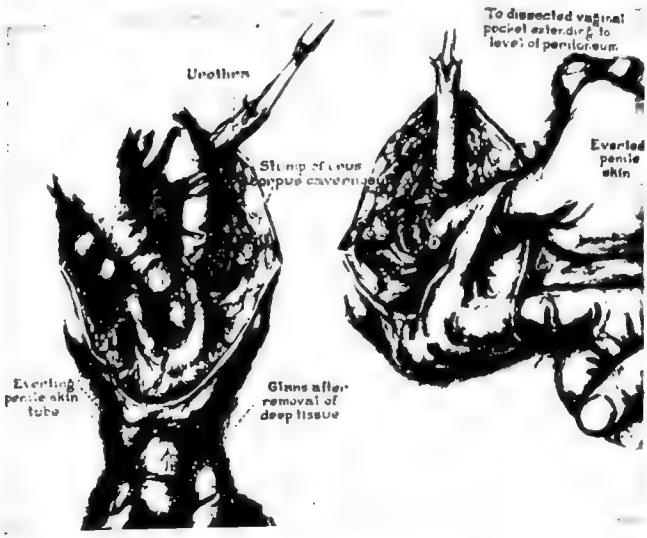

Figure 6. First stage (see text).

Figure 7. First stage (see text).

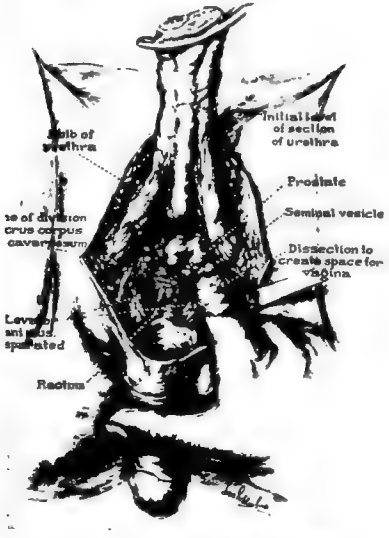

Figure 8. First stage (see text).

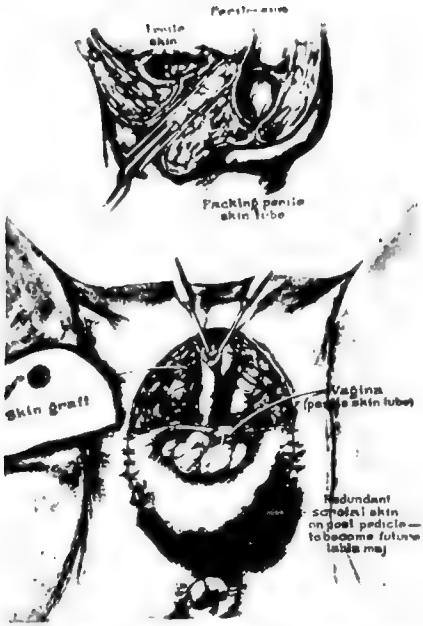

Figure 9. First stage (see text).

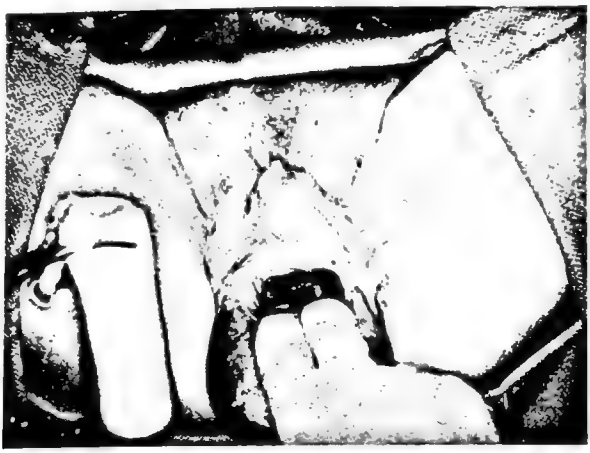

Figure 10. First stage postoperative.

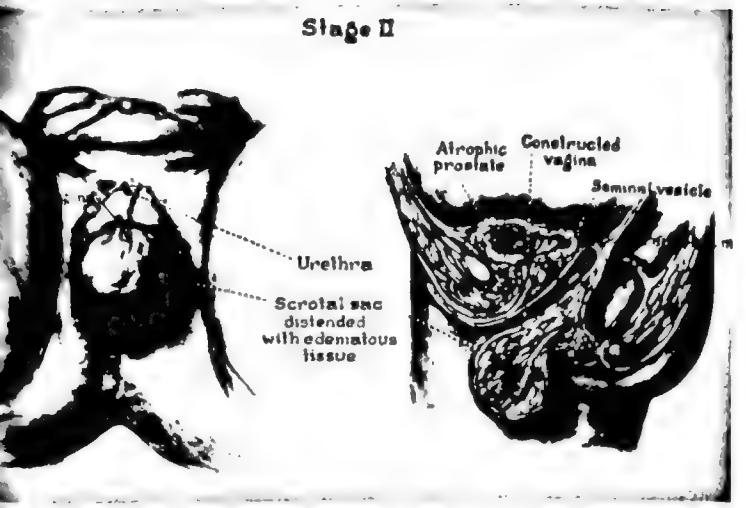

Figure 11. First stage postoperative.

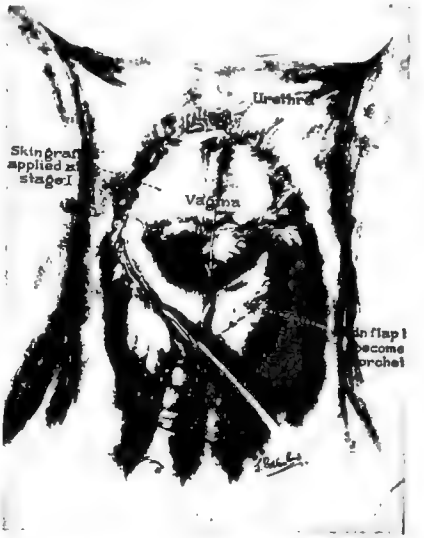

Figure 12. Second stage (see text).

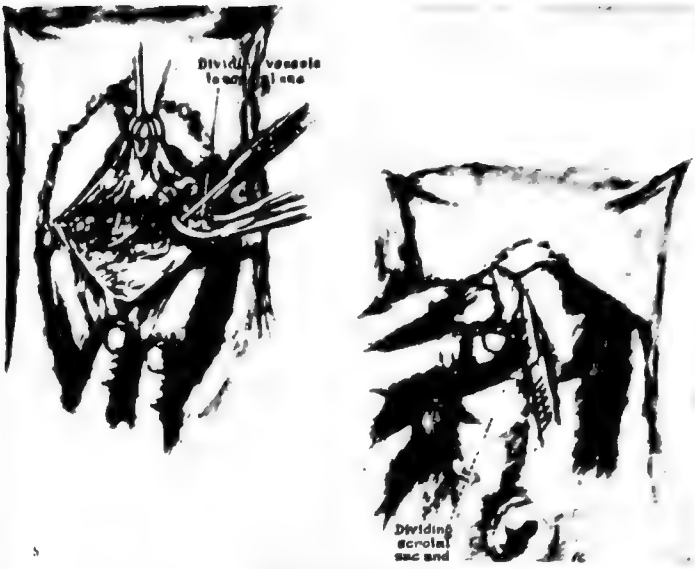

Figure 13. Second stage (see text).

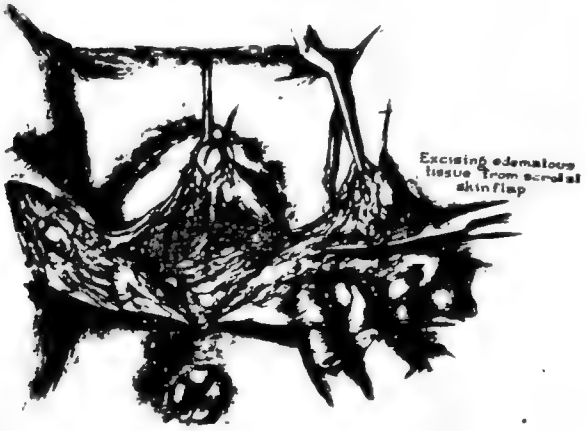

Figure 14. Second stage (see text).

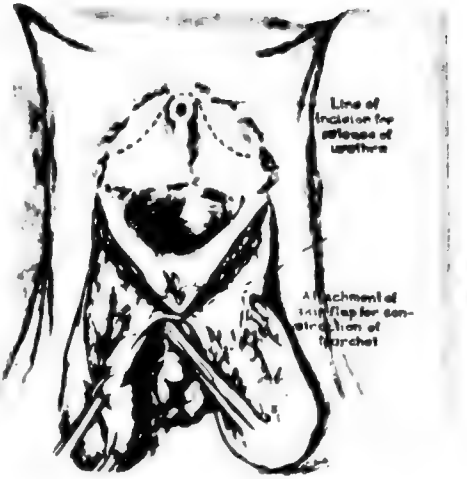

Figure 15. Second stage (see text).

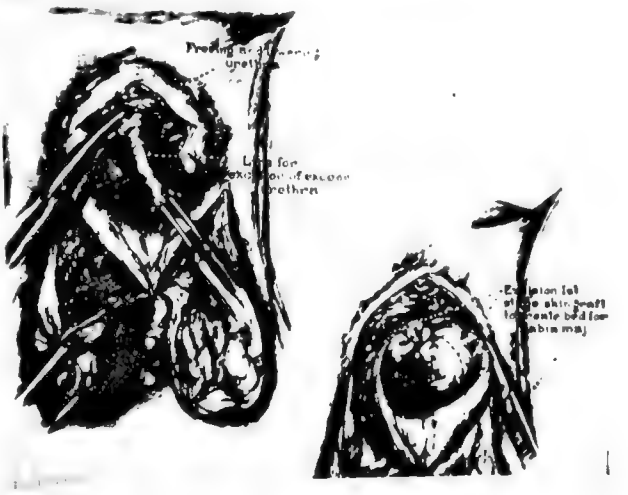

Figure 16. Second stage (see text).

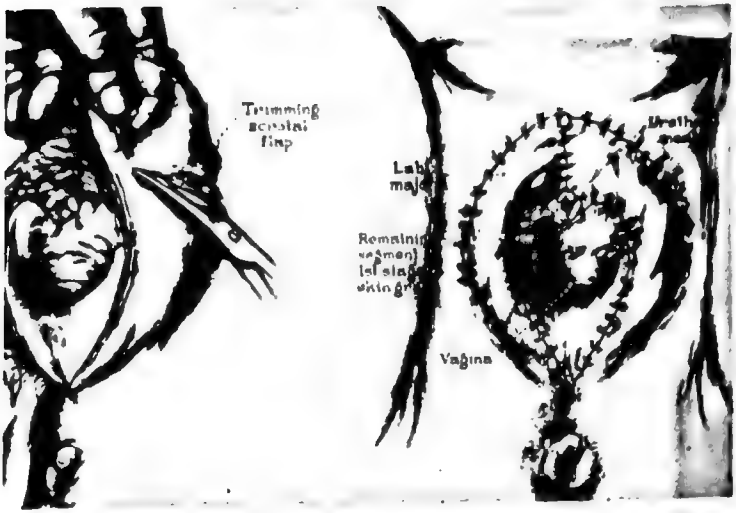

Figure 17. Second stage (see text).

Figure 18. Postoperative results.

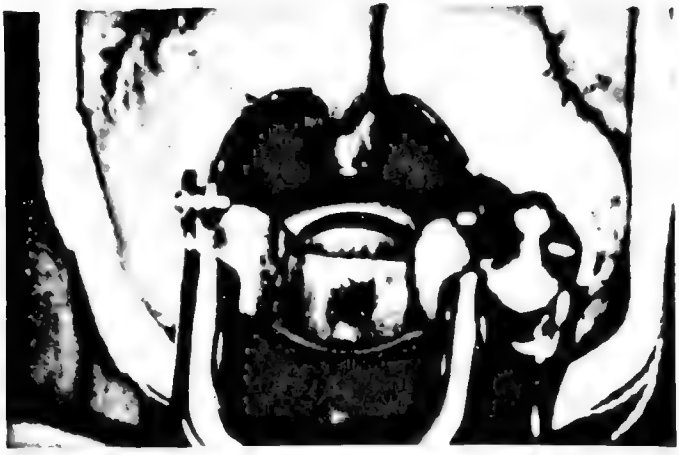

Figure 19. Postoperative results.

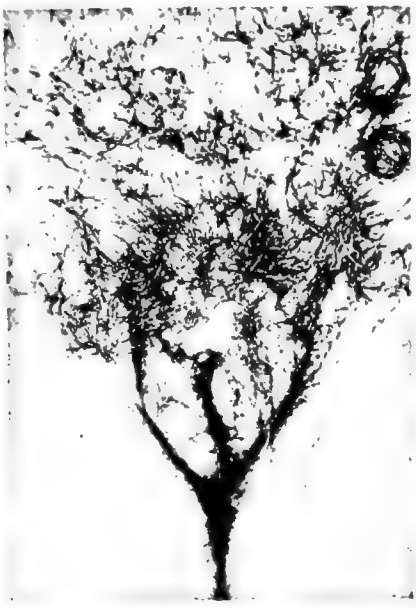

Figure 20. Postoperative results.

A Surgical Program for Female to Male Transsexuals

Joel M. Noe, M.D.
Dale Birdsell, M.D.

The Stanford Gender Identity Clinic has developed a multidisciplinary approach to the investigation of problems of gender identification. From a surgical point of view, a program has evolved which attempts surgically to meet the psychological demands made by the classic transsexual. The surgical program, which proceeds only after intensive screening procedures, consists of three areas of surgery: facial surgery, that is, a rhinoplasty or other cosmetic work that would culminate in a more masculine facial appearance; reduction mammaplasty; and finally, construction of the external male genitalia. A hysterectomy and bilateral salpingo-oophorectomy complement the reduction mammaplasty in excising the female organs.

Prior to any surgery, the patient is evaluated from a multidisciplinary perspective; that is, psychiatric, psychological, plastic surgical, endocrinological, urological, gynecological, legal and social. The patient must cross-dress for one year and also have been on hormonal therapy for one year prior to surgery. In general, patients who are over 60 years of age, married in their anatomic sex, psychotic, or have a medical illness which is life limiting, are felt not to warrant surgery.

The surgical timetable is dictated by the psychological needs of the patient. In most cases, the rhinoplasty and reduction mammaplasty have preceded the construction of the penis. Without compromising the quality of the surgical and medical care, we have, in a number of circumstances, combined the operations such that we perform more than one procedure at a time.

The major strides in the reconstruction of the penis have developed largely for treatment of traumatic loss. Other causes of losses or absence of the

penis have been cancer, infectious or metabolic derangements, or congenital abnormalities, such as seen in the pseudohermaphrodite—either those born with hypospadias or those with adrenal hyperplasia.

Historical Perspective

Historically there have been two main methods of reconstructing a penis. The first has been the use of the Filatov tube pedicle. The second has been the use of scrotal skin. A third method has been used when a remnant of the penis has remained. In such cases, a penis has been reconstructed by deepening the remaining structures and using local flaps. Hypertrophy of the clitoris by means of hormonal therapy has not been accepted as an adequate substitute for a penis.

The objective of these methods has been to construct a penis which meets the following criteria:

1. Psychological
2. Cosmetic
3. Physiological
   a. Erection—an instrument of intercourse
   b. A urinary conduit
   c. A seminal conduit
   d. Sensibility—a genital stimulation area

Rigidity of the reconstructed penis has been obtained with an implant—bone, cartilage, rib, acrylic, or silicone—which allows coitus.

In many mammals erection of the penis is assisted by the presence of a baculum or os penis. This baculum or "little stick" was observed by Aristotle in the fox, wolf and marten. This bone varies in length from a few millimeters in some of the smaller mammals to 55 cm in the walrus and 2 meters in the whale (Bergman).

As the ladder of evolution is ascended, the bone steadily diminishes in size until in the anthropod ape it is degenerated into a structure 10 to 20 mm short. It is doubtful if man ever had such a bone, rather relying upon his erectile tissue within the penis itself to attain rigidity of the organ (Betts).

The tube pedicle method has been the most popular. Filatov, working in Russia as an ophthalmologist, developed the first tube pedicle in 1916. He used it to transpose tissue to recreate a lower eyelid. In 1936, Professor N. A. Bogoras, also working in Russia, successfully restored the major portion of a penis lost in an accident. This was accomplished after several attempts by implanting an autogenous rib cartilage into an abdominal Filatov tube pedicle.

Gillies, working in London in the mid-40's, and Frumkin, working in Russia at the same time, popularized Filatov's tube pedicle technique as a method of reconstructing the penis. Frumkin's major contribution was

implanting cartilage into his tube pedicle. Gillies, following the suggestion of Maltz, incorporated the urethra into the body of the penis. He did this by developing two abdominal tubes, one of which he inserted within the other, to produce a penile shaft and urethra. Into this he implanted a cartilage.

Since Gillies' and Frumkin's work in the mid-40's, subsequent surgeons have sophisticated the technique, primarily by using different sources of tissue, by migrating it to the genital area in different ways, by constructing the urethra (when it has been constructed) by different methods, and by varying the stage at which the prosthetic ridigity is best inserted (when it has been inserted).

There are, however, many disadvantages of the tube pedicle. The first is the large number of stages needed to develop a tube, then migrate it to the genital area, and in the process construct a urethra and add an os penis as needed. Associated with this large number of stages has been the long length of time needed to perform the full surgery.

The second disadvantage has been from a cosmetic standpoint. In the creation of the tube and its subsequent migration, the abdominal wall is scarred to a mild degree.

The third disadvantage is the lack of sensation that the newly created organ possesses. An example of this is one of Gillies' original cases, who reappeared in the surgical literature nine years after having incurred a hot-water bottle burn of the penis, most likely secondary to the relatively anesthetic tube.

The fourth relative disadvantage is the occurrence of complications associated with attempts to reconstruct a urethra. In the literature there are reports of strictures, fistulas, calculi formations, urinary incontinence, and infections complicating this aspect of the surgery. When hair-bearing skin has been used to construct the urethra, the hair has often been troublesome in the sense that its follicles precipitate an infection with a subsequent draining sinus. Complications of urethral fistula with urinary infection and os penis extrusion have been reported.

The second method of constructing a penis has been the use of scrotal skin. Essentially local tissue and local flaps are used to recreate the penis. Goodwin and Scott in 1952, Chappell in 1953, and Kaplan, most recently in 1971, have all been advocates of this method. When necessary, cartilage or acrylic support has been added if sexual function was desired. The advantages of the use of local tissue from the scrotum have been the small number of stages (often times just one), the simplicity of the construction, the use of sensitive skin leading to a sensitive organ, and the lack of any abdominal scars, as this area is not violated. The main disadvantage, to a number of observers, has been from a cosmetic point of view—the hairy, redundant, corrugated tissue of the scrotum. A further disadvantage of the scrotal method is that it

needs cartilage for support more than an abdominal tube, and the cartilage has inherent problems which will be alluded to shortly.

Penis Construction in the Transsexual

As Edgerton has stated, the term "transsexualism" now has been widely accepted in the medical literature as designating that psychiatric syndrome which is characterized by the individual's attempts to deny and change his (or her) biological sex and to thus achieve and permanently maintain the opposite gender. In the female transsexual, who is attempting to become male, the objective of the surgical program is construction of the penis as well as construction of the whole external genitalia, including the scrotum and the implantation of testicular prostheses. We have, therefore, applied the previously described reconstructive surgery procedures for a recently described condition.

In constructing the external genitalia for the classic female to male transsexual, we have not attempted to meet all the objectives mentioned above as part of the historic goals of penis construction. Specifically, we have not attempted to meet the psychological, cosmetic, and that part of the physiological objectives that was concerned with producing a rigid penis, so that with a temporary implant, coitus could be attained.

Given the difficulty and the number of complications—specifically strictures, fistulas, infections, calculi formation, urinary incontinence, and problems from hair-bearing skin that have been encountered in constructing a urethra—we have not attempted to construct a urethra. We feel that these difficulties and complications outweigh the benefit to the transsexual gained from his ability to stand when he urinates.

It has been our feeling that there is no place for a permanent prosthesis in the construction of the penis. In a movable organ without sensation, such as seen when the abdominal tube pedicle is used, extrusion of any permanent implant is possible. When the scrotal method is used, as mentioned above, a cartilage is needed more than when an abdominal tube is used. By producing a permanent erection, the cartilage exposes the reconstructed organ to a greater risk of trauma. A number of surgeons have pointed out that scarring and fibrosis within the penis itself may be sufficient to provide enough rigidity for intercourse. While this may be so for the first 12 to 18 months postoperatively, we have found that this scarring recedes and then is no longer sufficient to provide rigidity for intercourse. Because of the above problems, we feel that a temporary prosthesis, one that can be inserted at the time of intercourse and act as a baculum at that time only, overcomes the problems associated with the use of a permanent prosthesis.

We also make no claim of providing an organ that serves as an area of

genital stimulation. Because the tube pedicle has very coarse touch sensation, no attempt is made to amputate the clitoris or interfere in any way with its sensibility so that it may continue to serve its sexual function.

Essentially there are two stages to the construction of the penis. The first stage consists of the construction of a bipedicle, midline, lower abdominal tube. The second stage consists of release of the proximal aspect of this tube with the concomitant construction of the glans penis. At this stage, a hysterectomy and bilateral salpingo-oophorectomy are performed. It is important that the hysterectomy not be done prior to the first stage of penis construction, because both the midline and the Pfannenstiel incision, through which the hysterectomy is performed, can interfere with blood supply to the tube pedicle. The labia majora are fused during this second stage. An optional third stage, done under local anesthesia as an outpatient, is the insertion of testicular prostheses.

Technique

The first stage in the construction of the penis is the creation of a standard bipedicle tube. Incisions are designed in the midline of the lower abdomen such that a vertical tube will be created. Two incisions are made, extending from the umbilicus to the area of the pubic symphysis—8 to 9 cm apart. These incisions are carried down through the skin and subcutaneous tissue until Scarpa's areolar fascia is identified. Scarpa's fascia is undermined after it is incised in a vertical direction parallel to the incisions on the skin. The tube is then created. The abdominal skin, having hair, is inverted such that the hair remains in the inner aspect of the tube, and Scarpa's fascia is sutured around this tube. Absolute hemostasis is obtained and a split thickness skin graft, about .0016 in thickness, is harvested from the buttock or hip area. This split thickness skin graft is wound around the tube upon the richly vascular base afforded by Scarpa's areolar fascia. The graft is placed in a barber pole pattern so that no longitudinal lines which could subsequently contract are created. A thick split thickness skin graft is also placed in the base of the distal pedicle to provide extra skin necessary in the second stage to turn the tube 180° into its resting position in the genital area.

The pedicle donor site is closed with a view to minimizing any bad appearance in the lower abdomen. If tension is present, we have not utilized split thickness skin grafts in the closure of the pedicle donor site, but rather accepted a widened scar which is revised at the next stage. The wound is dressed such that the tube pedicle is supported in its new position. Postoperatively, the patient is immobilized for a number of days. When all areas have epithelialized, the patient starts to condition the pedicle with the use of a tourniquet around the proximal aspect. He starts at five minutes every

four hours working up to one hour, two or three times a day. When the wounds are completely healed and the blood supply is sufficient to nourish the tube from its distal aspect, the second stage is begun.

Releasing the tube, fashioning the tip to construct the glans and corona, and fusing the labia majora as needed to create a scrotal appearance, are accomplished during the second stage. A hysterectomy and bilateral salpingo-oophorectomy are performed, using the midline scar which had been created from the use of this skin as the donor site of the pedicle.

A transverse elliptical incision is made around the proximal end of the bipedicle tube flap, incising through the skin and subcutaneous tissue and thereby releasing the proximal end of the tube. The glans penis is constructed after removing excess subcutaneous tissue. The corona is fashioned by using epidermal to dermal stitches to create an overlap of the skin.

By leaving the inverted tube open at both the proximal and distal ends, good hygiene is facilitated through this abdominal skin tunnel. The presence of an orifice within the tube also facilitates the use of a temporary baculum which is inserted through the proximal opening of the tunnel at the base of the constructed penis. The insert rests on the pubic symphysis in such a way that an erection can be transmitted from this area through the penis. Thus, we have had no problems from the presence of hair lining the inner aspect of the tube. Hair appearing on the glans penis has not been a problem to date, but this is potentially a cosmetic deficiency of the procedure.

The labia majora is fused in the midline so that a scrotum in appearance is constructed. The labia majora are each incised in their midline, hemostatis is obtained, and then a three-layer closure—consisting of the posterior epithelium, the subcutaneous tissue and the anterior epithelium—is performed. The caudal end is left open to facilitate hygiene and urination. As mentioned above, no attempt is made to amputate the clitoris or to interfere in any way with its sensibility.

Results

To date, the Stanford Gender Identity Program has operated on 20 female-to-male transsexuals, of which 11 have had a penis constructed. The technique utilizes old reconstructive surgery procedures for a new set of objectives. The average patient has undergone two stages to construct his external genitalia.

Discussion: Dr. Noe

We make two incisions in the lower abdomen, and then infold the abdominal skin on itself and cover this with a split thickness skin graft. Thus,

an orifice within a tube is created, into which a prosthesis is inserted. The prosthesis is essentially a straight tube with a circle at the end of it. This prosthesis acts as a substitute for a baculum or "os penis." We ask the patient to insert it at the time of intercourse; it thus provides rigidity for erection and acts as an instrument for coitus by resting against his pubic symphysis. Initially, we made it of a metallic material but in the past six months we have switched to silicone which traumatizes the tissues much less.

* * *

Patients irrigate the tube daily and wash the surrounding area with soap and water. To date, with this method of hygiene, combined with the fact that the tube has an opening at both its proximal and distal ends so that any secretions can be easily discharged, we have had no problems from hair infections. We have considered electrolysis and plan to use it in some of our patients. We have been advised that it is best to wait for one year prior to traumatizing the tissues with electrolysis.

* * *

We incise the labia majora in their midline, starting proximally all the way distally except for the distal one and one-half cm. We then have a three-layer closure composed of anterior and posterior epithelium and the subcutaneous tissue in the midline. At the caudal end, we leave an opening so that hygiene can be facilitated by cleansing this area daily with soap and water, and any urine or secretions from the vagina can be discharged out this caudal end. There have been no problems with urine or vaginal secretions.

* * *

Of the eleven patients on whom we have constructed a penis, three have stated that for a number of psychological reasons they would like their vagina completely removed. From a surgical point of view, we have found that in each of the three, to remove the uterus through a vaginal approach was contraindicated because of a small introitus. We felt that it would be wiser to first perform the hysterectomy through the midline abdominal approach and then in the future see if we could remove the remaining vaginal cuff through a vaginal approach, if it was still a problem to the patient psychologically. In these three patients, we have not fused their labia so that at any time in the future, we can go back in and easily approach the vagina.

Figure 1. Incisions marked on abdomen.

Figure 2. Tube pedicle flap, inverted so abdominal skin forms a tunnel and raw surface is outward.

Figure 3. Tube pedicle skin grafted to form glabrous surface on shaft. Incisi
marked to form glans when pedicle detached.

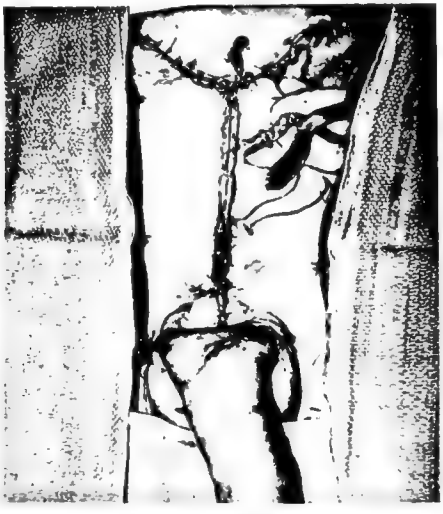

Figure 4. Immediate postoperative results.

Figure 5. Immediate postoperative results.

Figure 6. Postoperative results.

Figure 7. Postoperative results.

Figure 8. Postoperative results.

One Stage Operation for Male Transsexuals

Robert Flowers, M.D.

In our experience dealing with male transsexuals in Hawaii, we have found it advantageous to keep our operations simple–avoiding skin grafts and multiple stage procedures. We have tried an assortment of procedures on these individuals and settled on the technique which follows as it is simple, effective, and relatively inexpensive.

Although the procedure described in 1971 by Dr. Milton Edgerton in "Surgical construction of the vagina and labia in male transsexuals,"[1] is ingeniously conceived, we have found the morbidity rate high, the hospitalization lengthy, and the results in our hands not superior to the simplified procedure. We found the intermediate stage of Dr. Edgerton's procedure emotionally devastating to the patient.

The goals which we have set out to achieve are these: 1) psychological–a smooth transition with minimal trauma associated with the reassignment; 2) aesthetic–a normal appearing external genitalia; 3) surgical–a deep vagina, which is relatively free of hair and requires minimal care in terms of dilatation, and a urethra without stricture, which functions well and requires minimal urological care; and 4) economic–an operation which can be afforded by individuals and tightly-budgeted agencies.

The procedure we have utilized is one similar to that described in 1968 by H. W. Jones, Jr., M.D., Horst Schrmer, M.D., and John E. Hoopes, M.D.[2] It involves labia majora constructed laterally from scrotal tissue, an anterior flap consisting of the skin from the shaft of the penis, and a shorter posterior flap composed of perineal and posterior scrotal skin.

The Procedure

1) The patient is in the lithotomy position. 2) The skin incisions are

marked. Except for an area of hair concentration near the penoscrotal junction, the entire penile skin is preserved as an anterior flap. 3) A posterior flap is designed from perineal skin and posterior scrotal skin. 4) Incisions are made, and skin flaps are reflected. 5) Bilateral orchiectomy is performed, as well as urethral dissection and transsection. 6) The corpora is dissected and the crura of the corpora cavernosa penis is amputated sufficiently short so that there is no protruding stump. 7) A Lowsley prostatic tractor is inserted into the bladder which vastly simplifies the dissection of the vaginal space. A finger is maintained in the rectum throughout the dissection. 8) The dissection is continued into Denovillier's space by a predominantly blunt technique. 9) The urethral opening is located on the penile flap, and a V-shaped incision is made. The urethra is delivered through that opening. 10) The anterior and posterior flaps are sutured together. 11) The flaps are delivered into the newly created vagina. 12) The flaps are secured in place with a vaginal stent. We have used a condom filled with soft gauze for this purpose. 13) The lateral scrotal flaps are sutured into position, forming labia. The urethra is transsected, and the V flap of penile skin is sutured into a longitudinal incision on the anterior of the urethra. 14) Suction drains are inserted and a pressure bandage applied.

If one feels the distal flaps are unsafe and in danger of necrosis, they may be defatted to survive as full thickness grafts.

It requires no great additional effort to perform breast augmentation at the same time. The length of anesthesia is relatively brief. Transfusions are not required.

With this simple procedure, patients have been able to leave the hospital very early in the first postoperative week. Postoperative care is simple. The stent is maintained in place continuously for six weeks. Early intercourse is encouraged. Dilatations are recommended thereafter in the absence of sexual intercourse.

The only transfusions required are in association with the second stage of the inverted penile tube procedure.

Results

Results are shown on two representative patients. The first (Figure 1) is an inverted penile tube case, and the second (Figure 2) by contrast, is a penoscrotal flap technique.

Summary

In summary, our experience in Hawaii has led us to a simple procedure—executed in one stage, with minimal morbidity, minimal psychological trauma, and minimal expense. We feel the results in our hands

are as good as with any other procedure employed.

References

1. M. T. Edgerton, M.D. and J. Bull, M.D., "Surgical Construction of the Vagina and Labia in Male Transsexuals," *Plastic and Reconstructive Surgery*, Volume 46, 1970, pp. 529-539.

2. H. W. Jones, Jr., M.D., John B. Hoopes, M.D., and Horst K. A. Schreiner, M.D., "A Fixed Conversion Operation for Males with Transsexualism," *American Journal of Obstetrics and Gynecology*, Volume 100, 1968, pp. 101-109.

Figure 1. Postoperative results achieved with the inverted penile tube case technique.

Figure 2. Postoperative results achieved with the penoscrotal flap technique.

Figure 3. Additional views of postoperative results achieved with penoscrotal flap technique.

Figure 4. Additional views of postoperative results achieved with penoscrotal flap technique.

Sex Conversion Surgery for Biological Male Transsexuals

J. William McRoberts, M.D.

The work which I would like to report on this morning has been done principally at the University of Washington in Seattle and, to a lesser extent, at the University of Kentucky in Lexington. The Gender Identity Research team in Seattle is headed by a psychiatrist, Dr. John H. Hampson. The approach is a collective effort at long term physical, endocrinological, and social rehabilitation, with the sex reassignment surgery but one aspect of the overall rehabilitative process. This research project is funded through the University of Washington Clinical Research Center, which covers all inpatient expenses. The patient is only responsible for outpatient charges. With that perspective in mind, I will limit my remarks to our sex conversion procedure for biological male transsexuals.

To date 22 patients have undergone sex conversion surgery, with excellent results in 13, fair to satisfactory results in four and initially poor results in five. As has been the experience of other teams, most of the complications occurred in the first half of the series. Far fewer occurred in the second half, as we became more adept and the second generation operation evolved. The surgical technique we currently employ is a one-stage procedure. Unlike Duncan Govan, we do not use hypotensive anesthesia per se, anticipating, I guess, that by midway in the procedure we will have some hypotension secondary to blood loss. Actually the measured blood loss for our procedure on these 22 patients averaged 720 ccs., with only two patients requiring transfusions of two units each.

With the patient in the dorsal lithotomy position, the operation is initiated with a primary U-shaped scrotal skin incision made with the apex at the penoscrotal angle. The scrotal skin flap is then developed and laid posteriorly. Although it is not shown in this particular film sequence, more

recently we have taken to making a vertical 4-5 cm. midline scrotal flap incision which settles the whole scrotal skin flap downward, and improves the cosmetic appearance of the posterior introitus. We developed this maneuver from the vertical scrotal incisions of Turner-Warwick, which were used in urethroplasties for urethral strictures. The incision does not interfere with the scrotal blood supply since it is in the midline.

The neo-vagina is developed prior to the penile surgery for two reasons. First, it is the most critical part of the procedure and deserves a fresh surgeon. Secondly, if intraoperative complications occur, such as getting into the rectum, the surgeon can back off to return another day without having committed himself by having done the penile surgery. The rest of the development of the neo-vagina is quite similar to a perineal prostatectomy. We prefer carrying the dissection beyond the prostate to the bladder neck. This is facilitated by using a Lowsley's prostatic retractor. These maneuvers insure a capacious vagina, provided the patient wears her vaginal mold postoperatively as instructed.

We erred early in the research project by using hard vaginal commercial stents which were not well tolerated by the patients who removed them as soon as they were out of the hospital. Two of these early patients subsequently developed vaginal stenosis because of premature removal of these uncomfortable molds. Since then, we have manufactured our own pliable silastic-coated, foam-rubber molds. The patients feel these molds are tolerably comfortable even while sitting. If there is inadequate scrotal and penile skin to cover the neo-vagina, usually due to a combination of the patient having been circumcised and some scrotal skin atrophy, we enlarge the neovaginal skin flap by interposing a 5-6 cm. segment of .018 split thickness skin graft taken from the buttock. This has the advantage of hairless skin in the vagina, but also has the disadvantage of requiring the patient to wear her vaginal mold longer; i.e., nearly constantly for six months and intermittently thereafter on a daily basis for at least two years. Thirteen of the 22 patients did not require a skin graft; nine did.

Now to the penile aspects of the surgery. What we do differently, in terms of all other known procedures, is to utilize all of the penile tissue except the glans penis. We preserve the corpora cavernosa. After dividing the corpora as you can see, they are brought out laterally and placed subcutaneously to simulate labia majora cosmetically. Most of the patients also find that the corpora developed tumescence with sexual stimulation, despite being on estrogens. Although most patients do not have orgasms, a few do, and I think this relates to how much estrogen they are taking. Some of the patients have found that, by reducing their estrogen dose, they are able to have orgasms after a month or so. But we discourage this and encourage the patients to take their prescribed doses of hormones.

In this series of 22 patients we have 13 patients with excellent results surgically, with functional vaginas measuring at least 15 cms. in depth and 5 cms. in width. Four patients have vaginas less than 15 cms. but greater than 11 cms., and all four complain of shortness that interferes with sexual intercourse but does not preclude it. Five patients were classified as poor results, that is, failures resulting from complications that followed the initial surgery. There were two rectovaginal fistulas among the first four cases, the first occurring secondary to the hard vaginal molds and the second intraoperatively. There was one vaginal stenosis after the patient refused to wear her hard vaginal mold, complaining of severe pain when it was in place. There were two bulbus urethrovaginal fistulas, due to a combination of dissection too close to the bulbus urethra and a urethral catheter pressing against the vaginal mold. I think these two complications could have been prevented had we used suprapubic catheter drainage rather than the urethral catheters. We now use a suprapubic catheter routinely.

Discussion: Dr. McRoberts

We feel so strongly about the necessity of postoperative follow-up—not only because this is a research project but also because we feel patients do better with long-term support—that at the University of Washington we actually ransom the patient. We have patients deposit $1,500.00 in advance with us, and this is slowly returned to them as they keep their subsequent follow-up visits. Since instituting this procedure, we have had 100% follow-up.

* * *

The question is, how is it possible to explain patients getting tumescence of the corpora while on estrogens? I must say that I initially did not believe the patients when they told me they got tumescence of the corpora. However, after seeing two patients demonstrate tumescence in the examining room, I am now a believer. One explanation might be that since these corpora tissues are obviously male in origin, they do not bind plasma estrogens the same as female tissues do. Some uptake studies might be appropriate here. Another possibility is that the tissues do not really involute that much, even in the presence of estrogen and the absence of testosterone (at least 95% of the testosterone).

* * *

As to our preoperative hormonal therapy, we attempt to recapitulate female puberty by first starting the patient off on estrogens, followed by a combination of estrogens and progesterone. Breast development, considered adequate by the patients, only occurs in 20-25%; the rest desire augmentation mammoplasty. Once the patient decides on breast surgery, we drop the progesterone and continue the estrogen. During this year, the patient must also completely cross-dress and work as a woman. I would emphasize that there

probably is no better single predictor as to how the patient will do overall following surgery, than her ability to be steadily and gainfully employed preoperatively.

Thyroid Cartilage Shave

Richard L. Goode, M.D.

The laryngeal shave operation is technically very straightforward and really has no major problems associated with it. We have had three cases. In one case, there was a prominent Adam's apple, and in two cases, the Adam's apple was not very large. However, it was a very important "deformity" to the patient.

A question laryngeal shave candidates often ask is, "Can you raise the pitch of my voice?" Although they usually have been on estrogens for months, I have not heard any with a definite high-pitched voice. Some have learned to produce feminine characteristics in their speech. However, there is no knowledge on how to surgically obtain a higher-pitched voice. Every procedure on the larynx that is done (biopsies, shortening the cords for various procedures, injection of teflon into the cords, corrections of webs and strictures) results uniformly in a hoarse voice. In some patients, the hoarse voice may be more feminine than their original voice. Additionally, in theory, there are some possibilities for changing the pitch by "tightening" the cords.

In our laryngeal shave technique at Stanford, we usually put the incision (which is about two inches wide) in a skin crease in the midline. Platysma is essentially absent in the midline. The strap muscles are moved laterally, exposing the thyroid cartilage. Then, with a sharp blade, we shave the upper aspect of the thyroid cartilage down until it shows a flat profile. We usually can take off one centimeter of cartilage with no problem. (One precaution: if you pull on the soft tissues in the midline between the two alae of the thyroid cartilage, you may find yourself looking into the larynx and see the back of the epiglottis.) I did this once, but it was no problem. One stitch and it closed up.

After the removal of the cartilage, the strap muscles are brought back and sewn together.The shave is done.The skin flap is sewn back, and a rubber

band drain is inserted. The sutures are taken out in about three days.

All these cases can be done under local anesthesia and on an outpatient basis. The patients stay overnight if they live a distance away or if there is no one to look after them. The only potential problem is airway obstruction if you have a hematoma inside.

Discussion: Dr. Goode

I think that any time you cut cartilage, whether it is in the ear or the larynx, the possibility of chondritis exists as a one or two percent incidence.

Discussion: Dr. Edgerton

I had one patient who developed a chronic and persistent hoarseness following reduction of laryngeal cartilages. We could not have been more surprised. A rather small amount of cartilage was taken off bilaterally. The larynx was not opened. The mucosa was very carefully protected. The patient was a teacher at a university and had to lecture for an hour at a time, two or three times a day. A year and three months later, he was still having difficulty with hoarseness after about thirty minutes of speech. The only finding postoperatively which contributed to our understanding was a little bit of bilateral edema at the anterior commissure after the voice had been used for a period of time.

Figure 1. Preoperative patient.

Figure 2. Preoperative patient draped.

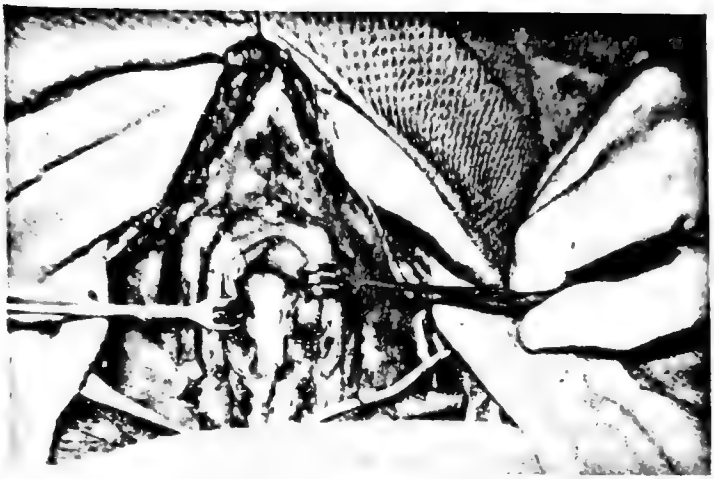

Figure 3. Patient intra-operative, thyroid cartilage shave.

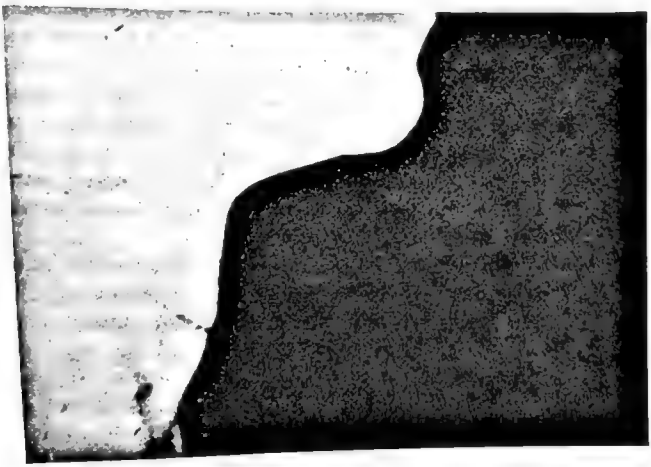

Figure 4. Postoperative results.

Complications in Male Transsexual Surgery

Colin Markland, M.D.

I wish to address myself to the problems arising from transsexual surgery, particularly in our experience of male to female conversion at Minnesota. These complications can be problems, not only at our center, but probably at all centers throughout the country. Part of the duty of this conference is to examine this subject honestly.

Figure 1 illustrates an example of the problem of introital stenosis. From our series of 43 patients, we have 14 who finished with long-term results like this. This is unacceptable. If there is enough depth, we can consider using an inlay skin graft to restore things to the way that we would like them to be. Some 70 percent of patients have a satisfactory stage operation, but in the remaining 30 percent we frequently have to do an extensive second operation. You can see in Figure 1 that the urethra has already been formed. When we do get a patient with introital stenosis, the correction is no simple matter. From the 14 we have seen with introital stenosis, we have been able to reconstruct nine. Seven are now satisfactory. Two are awaiting a further procedure, which illustrates the difficulties that can arise for these patients.

What happens when we get into problems after the patient has two or three attempts at skin grafting procedures to restore loss of vaginal depth? You can imagine what it is like—the amount of scar tissue; the remnants of slough, infection, and dead tissue; and other problems, even injury to neighboring structures. We have now approached this in a particular new way. Following the lead of Dr. Pratt from the Mayo Clinic, who worked originally with girls with vaginal atresia, we try to use cecum. In their cases, Pratt and associates introduced the idea of using isolated segments of bowel. We have now done this procedure on seven patients, using a part of the large bowel called the cecum. A segment is taken out of continuity, and the bowels are jointed

together again and brought down to this position. More recently, we have done four of these procedures using sigmoid colon. The first patient we did with this technique had an unusual emergency after a cecal operation. The stent was put inside the cecal vagina, and then the vagina was so large she could not get it out. She came into the hospital on Christmas morning for an instrumental delivery of the stent. More recently, we have abandoned the use of the cecum for technical reasons. We now take the sigmoid colon out of continuity (the sigmoid colon which is a lower part of the large bowel), and then bring it down behind the bladder in a rather complicated manner.

I now wish to address myself to our responsibilities as surgeons in the question of immediate and long-term postoperative care. I think most of the surgeons here will probably symphatize or empathize with me immediately, because these patients often pose difficult surgical problems. I bring this aspect to the attention of the psychologists and our other associates, to let you know that we surgeons must be prepared to follow things through and deal with all manner of problems until the patients have a satisfactory functional result.

Our surgical experience is based on the prospective study that Dr. Hastings started in 1964 at the University of Minnesota. The thing I learned from the study which is so important, is continued care. We have a moral and human responsibility to these people.

This is what has happened in 43 operations in 25 patients. One immediate complication was sloughing of the skin. Also, at the time we were using hard stents, we had two cases of anuria (failure of urine output). One patient became so sick she required two turns on the artificial kidney until the kidney started working again. Due to pecularities in body size in many of these patients, other complications developed. Two patients had nerve palsy, due to the position they had to be put in on the table. Three had a rectal injury. All these patients recovered.

As to the question of surgical complications, vaginal stenosis often relates to whether or not the patient can keep the vaginal stent in place. Infection or stenosis possibly relates to the particular surgical technique.

I think there is great similarity with many of the surgical techniques, but it is important to get right up behind the bladder. The neovaginal space is critically close to other structures and there is a difficult anatomical relationship between the bladder, the urethral tube from the kidney, the rectum, the urethra and the various areas that we have already seen. If this is so, what can be done in centers where men are trained, equipped, and have the kind of understanding of this particular part of the surgical art, to minimize the problems?

One of these complications is a urethral fistula. The question

of the urethra has been talked about by several people. We find that cutting the urethra close to the neo-vagina obliquely, and fishmouthing it, lessens the chance of stenosis and narrowing in this area. (I believe Dr. Burou talked about this when he mentioned the question of subsequent urethral dilatations.) We believe that if this meatus is made by cutting on the slant, it lessens the chance of meatal stenosis.

Some of the more troublesome complications in this moist skin neo-vaginal sinus can be caused by hair, even though in our experience the estrogen therapy usually makes the hair quite fine, thin and silky. Another problem is venereal warts. In our series of 25 patients, we have had two who presented with primary syphilitic chancres and three who presented with gonorrhea within the urethra. Patients cannot, of course, get gonorrhea within the vagina, that being an epidermal structure. However, they can get gonorrhea both in the urethra and rectum, and become carriers of rectal gonorrhea.

Other bizarre complications are where a patient took matters rather severely into his own hands. After a patient successively self amputated his penis and both testes, he left us only a small amount of scrotum. We were able to salvage this in the usual way, using skin flaps, etc.

Lastly, I would like to bring up the question of late-term complications, particularly related to damage to the rectum. This is important for the type of patient who is coming from long distances. I would caution you on this point. One patient, who had been operated on in New York, presented at Minnesota at 6:00 one evening, dangerously ill with a temperature of 104° and a large rectal fistula. The tragedy of this patient is that she had saved up her money, but because of the problems with our research protocol and the difficulties in admitting as many people as we would like into this study, she decided to go to New York. There the operation had been done over a five-day period for "cash on the barrel head." The patient had the surgery and two days later was sent out from the hospital into a motel. The fourth day she was sent home to Minnesota and came to see us in the Emergency Room with the massive rectal complication. I am not suggesting that this does not happen to us. It does, as I tried to point out. What I am saying, though, is that we have a moral responsibility to any patient, whether it be for money or not for money. The important thing is that we must assume this moral responsibility for immediate and, obviously, long-term follow-up care. If we are doing this operation, and they come from halfway across the world, as obviously happens to Dr. Burou, then compromises may have to be made. At the same time, I believe that if we are going to remain in "business"—and by that I mean the ethical profession of medicine and surgery—we must take total responsibility to avoid disasters. The complication described above required surgery, with various surgical procedures such as colostomy. Fortunately the patient did very well, and we

were able to maintain the good surgical operation that had been performed in New York once the complication was under control. The last thing, then, is the need to stress continued x-ray evaluation. We believe these patients should have an x-ray of the vagina every six months, or perhaps once a year on their birthdate. They particularly need follow-up with regards to the long-term effect of hormones. Our first patient, Emily, was operated on in 1966 when she was 54 years old. Three months ago in Salt Lake City, she had a proven diagnosis of cancer of the prostate made by one of my urologist friends. As far as I know this is the first time this has been recorded and proven surgically. It is a very worrisome thing, particularly since this patient had been on estrogen therapy for six years. As you know, estrogen therapy is sometimes a treatment for cancer of the prostate, and if anything should stop or prevent such a serious disease, it should be this. Similarly, there is the question of continuing to watch breast development. We know that "genetic males" taking long-term hormones may have an increased incidence of cancer of the breast. Again, this is another example of the continued moral responsibility we have to follow these people. I think some of us, perhaps myself included, on occasion might get the suggestion that we do this surgery, the people run away, and we never see them again. We also forget the referring doctor may not check the breasts or prostate. These are specialized things which we as specialized men have to take onto ourselves, as part of our ongoing care of these patients.

Discussion: Dr. Markland

We have had three or four patients who, even after relatively successful surgery, look as though they could still play for the Minnesota Vikings or the San Francisco Forty-Niners. The thing is, in terms of satisfaction as a surgeon, I now pay much less attention to it than I did some years ago.

There were two cases of anuria. One was a diabetic, aged 50. It was just bad case selection in the early days, using a hard stent. The problem was that we went way up behind the bladder, to create a very large vagina. I think that we pressed on the ureters with the hard stent. There is less chance of this happening now.

There is an enormous spectrum in these patients, not only in size and psychological data, but also physiological data. You get people with every illness, people who are quite sick, still demanding help with reassignment surgery.

Figure 1. Postoperative patient with introital stenosis.

Figure 2. Radiogram showing adequacy of vagina, formed from cecum, an operation used for treatment of severe postoperative vaginal stenosis.

Penile Substitution with Clitoral Enlargement and Urethral Transfer

Raphael Durfee, M.D.
Willard Rowland, M.D.

There are very few gynecologists involved thus far in this area. Our group at the University of Oregon works under the guidance of Dr. Ira Pauly, Professor of Psychiatry, in the area of management and evaluation of patients.

Using high doses of androgen for a fairly long period of time, we have been able to stimulate growth of the clitoris to the point where this organ can be used as a penis substitute. Dr. Will Rowland, who is a fine plastic surgeon, and I undertook to find out if we could use an enlarged clitoris and build into it a urethra. It is a fairly simple affair. We do a reduction mammaplasty through an incision made in the area of the areola. At the same time we do a bilateral salpingo-ovariectomy, a total abdominal hysterectomy and a total vaginectomy. This is a formidable procedure.

The recovery from this is fairly good. Subsequent to this we continue the patient for approximately six months on fairly high doses of androgen, until we feel that the clitoris is enlarged to the point where it is usable. We then take the patient to surgery and very carefully strip down the inner mucus membrane lining of the minor labia. We unite these around an inlaying Foley catheter and carry the tissue up to the glans or the head, if you will, of the clitoris. The new urethra is reinforced with the outer layer of the minor labia. These patients do very well. We have had no problems with incontinence. They have had no difficulties whatsoever with urinary retention and it works readily as an elongated urethra.

We take the patient to surgery once more to mobilize the base of the clitoris and advance it downward approximately 2 to 3 cm, depending upon the anatomic relationships of the individual. We also mobilize the upper

portion of the major labia to give more tissue bulk to this somewhat phallic-like organ.

We have been able to produce a phallus-like organ which resembles a penis in the circumcised state, approximately three inches long, through which the individual can urinate freely. At the same time, we will mobilize the tissues from the posterior portion of the major labia, strip out the fatty tissue and put in silastic testicles. In all our experience, the patients have been very satisfied with this procedure. Moreover, as time goes along, gravity has a tendency to improve the situation.

Penile size is really not the important factor here, but the functional capability of the area really is. Two of these patients have reported to us that the sensation that they have from this tissue is remarkably good. I think we are just beginning to scratch the surface of what we really hope to be able to do with this procedure.

Discussion: Dr. Durfee

We have not been able to demonstrate any erectile capability of this organ, except that two of our patients described that when they are sexually aroused, they have a feeling of swelling and turgidity in this area.

Testosterone does not really do much in the male, but it seems to work in the female. We have begun to get some experience with this by using small doses in women who were anorgasmic, psychologically, and if we were careful to use minimal dosage so we had no masculinizing effects, we very often stimulated the libido.

Our dosage was 100 mg. twice a week i.m. We have not used the testosterone powders.

After the operation, we carry them at about 50 to 70 mg. per week.

Two of the patients have said that they have had more than one orgasmic experience with sexual contact.

* * *

We have not had too much trouble with the insurance companies with these procedures. We simply bill the insurance company for reduction mammoplasty, bilateral salpingo-ovariectomy, vaginectomy and hysterectomy. When it comes to the plastic surgical aspect, I do not know what Will Rowland does. He bills the patient and we get paid. We do not call this a transsexual operation. I do not think that we are deceiving or hiding. We are just doing the procedure.

* * *

As a gynecologist who has done a great many vaginal rebuilding procedures and made vaginas for those who need them (which is really what we are talking about), we have two operations. In one, we simply turn the perineal

tissue in, placing a vaginal stent, stimulating the region with estrogen locally and using a systemic estrogen as well. This allows the natural epithelium to grow into the space where it should have been in the first place. We have also used a split thickness graft. But the secret of success to me is to encourage the individual to wear vaginal obturator as much as possible for at least two years.

I do not care whether you are doing it for a transsexual conversion, for a girl who came without one, or for a woman who had a vaginectomy for cancer. If you will provide the individual with the capability and the motivation to keep the area open with a stent that is large enough to hold it, ultimately the scarring and the ability of the body to fill in the vacuum will cease and you will have a good deep, functional soft vagina.

Figure 1. Presurgical clitoral hypertrophy.

Figure 2. Post labia minora conduit to conduct urine to glans of penis.

Figure 3. Post second stage—migration of clitoris posteriorly.

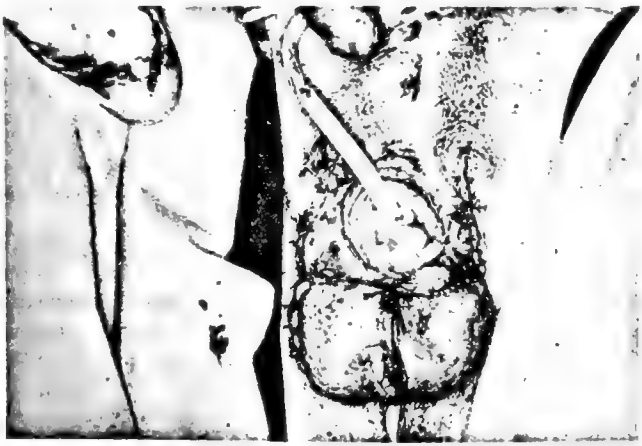

Figure 4. Post third stage—implantation of testes.

Technique of Male to Female Surgery

Benito Rish, M.D.

Basically our technique has not changed in five years; we are still doing the one stage procedure. We were obtaining our silastic prostheses from a company in Connecticut. They were quite hard and rigid with a tube. At the present time, we make our own out of much softer material. We make the elastimer with silastic, liquid silicone and a catalyst. Then we take the cover from a 50 cc plastic syringe and pour the elastimer into that to make our prostheses.

We try to make a deep vagina. Unfortunately, tissues will break down, scarring will occur, and very frequently we do not achieve the depth of vagina that we wish. Of course, the depth of the vagina is limited by the length of the penis. The longer the penis, the more skin available to create a deep vagina. If people have been circumcised, a certain amount of skin is lost.

At the present time, we are using the glans penis, thinning it out and including it in our tube to try to provide extra length. If the penis is small, and this occurs in 20 to 25 percent of the cases, a split thickness skin graft is used where the penis ends and the prosthesis goes in.

We make a vertical or semilunar type of incision in the scrotal area and start by making our vaginal cavity. At the time the vaginal cavity is dissected, we try to separate the corpus spongiosum from the corpus cavernosum. We then amputate it at the most proximal part so there will be no stump. During intercourse, some patients will actually have an erection on the side if part of the stump is left.

The urethra is preserved until the very end, when we cut a good portion of it and bring it out to form the neovulva. We do a careful dissection of the urethra. It is important to leave the spongiosum around the urethra to give it a little strength so there is not much danger of breakdown. However, the corpus

spongiosum is the area that usually bleeds. The catheter goes through the penis, and we insert an indwelling Foley catheter.

We close the end of the penis, which will actually be the end of the new vaginal opening. I believe we do not depend on the blood supply completely in these things; we depend on it being a full thickness graft. Basically the penis is inverted into the new vagina and the labia, of course, formed by the remainder of the scrotal skin.

We have patients wear the prostheses for a period of at least two years. When they go home after the first 10 days, patients must wear them every hour for a good half hour and preferably during sleep.

There is a tremendous amount of "pull" to try and bring the penile skin down into the vagina. What we have done is to take the pubis and, using a wire suture, put a tremendous amount of tension on it to pull that skin down. In the pubis we take the periosteum and a 4-0 wire suture. We take several of these sutures and put a tremendous amount of tension on the stent. The sutures are brought down through the skin itself and tied over small batons of Furacin gauze. We have to be careful with this procedure, because the pressure itself may cause necrosis at this point. Therefore, we usually watch it carefully. The wire sutures are cut in two to three days or, if they look good, a week. If there is a slight area of necrosis in that area, it will heal. We feel that it is important to pull this skin down and allow less tension in the vagina while making the opening for the urethra.

We bring the urethra out through this opening and turn it on itself. It is cuffed so there will be less danger of it becoming strictured. Since it is difficult to hold the prosthesis in, we take a 2-0 silk and tie the prosthesis to either side of the leg. Unfortunately, there is some degree of pain associated with this. On the third or fourth day, we cut those black sutures. The sutures are tied to either side, actually to the thigh, and we trim the skin of the labia as much as we feel we need.

Male to Female Transformation

Georges Burou, M.D.*

Dr. Burou is a gynecologist from Morocco who had previous experience making a neo-vagina in cases of vaginal atresia. He treated a male patient who insisted upon sex reassignment surgery and went into this field. When Dr. Burou created the operation, he was totally unaware of previous such work in the world. He thought at that time that the best thing to do was to utilize the live graft which can be made from the penile skin when properly dissected. This is what he is going to describe now. This is the first report on this new technique.

Dr. Burou wants to thank very much many American physicians who supported him in his work, referring many American patients, and who have been extremely helpful in corresponding with him.

The entire surgical operation is done in one stage, consisting of two successive steps. All the patients who under go surgery have been prepared, undergo psychiatric care, on hormones, and made quite feminine. The first step is made on a very narrow surgical field and the goal of this first step is to create a space between the rectum and the prostate. The first incision is made posteriorly between the anal area and the scrotal ridge. This first part is extremely important, because you can determine at any time by intrarectal inspection that there is no lesion to the rectal wall. This is very important to avoid any further complications during the dissection in the rectum in the prerectal space. Figure 1 shows the first incision going from the anal area through the ridge of the scrotum. On the left of the figure is the first dissection of the bulb and both corpora cavernosa. The cleavage between the rectum and the prostate is made by cutting all the ligaments between the bulb and the

*This report is a translation of Dr. Burou's remarks.

rectum. Then Dr. Burou positions the cleavage with his finger in the natural space which is between the rectal wall and the prostate. The cleavage is done when you can admit easily two fingers of a vaginal retractor. One can meet at the end of this new space a natural formation which makes you feel that you are really meeting the natural vaginal cul-de-sac, Douglas space. The first step is over.

The first step is in fact the most important and most dangerous. The second one is relatively easy. One enlarges the surgical field in the most usual way, taking all the usual precautions. The initial incision is now prolonged under the scrotum to the root of the penis. The surgical field is widened by retracting and widely exposing the scrotal skin on both sides. On the neocolporrhaphy we have both the corpora cavernosa, spongiosa, and the two testes. The testes and its beaker will be cleaved by cleavage of the fiberous tunica. Figure 2 shows that the high testes has been dissected through the fat pad attached to it. It is separated on the inside from the corpora cavernosa, and it is also freed from the lateral wall. Once the testes and all the surrounding pedicle have been freed, the spermatic cord is cut and ligated, as can be seen in Figure 3. Removing the section of the testes and all the mass surrounding it, requires very careful hemostatis and the right sectioning of the bulb, corresponding to the future urethra. The right of Figure 3 shows where both corpora cavernosa will be sutured; the needle is visible. On the right, the corpora cavernosa is shown firmly sutured with the future urethra pending on the right. Above are the erectile bodies of the penis. The left side of Figure 4 shows the erectile bodies being pushed out and dissected from the penile skin. Figure 5 shows that practically all of the skin of the penis now has been completely freed from the erectile bodies. Figure 6 shows the complete dissection of the penile skin; you even keep the foreskin when available. It is at this stage that the end of the penile skin is being sutured and closed. This will constitute later on the neovagina.

Figure 6 shows the neovagina quite ready to be inserted in the prerectal space which was created. On the lower abdominal skin is a slight skin slit which will allow the future urethra to be passed through. The figure also shows an important feature coming through the skin near the anal area—two threads which are being inserted on the levitor ani muscle. These two threads will serve to support a bougie of Eggar, a prosthetic instrument known in obstetrics. This bougie of Eggar will be placed in the neovagina to provide support. Figure 7 shows a drain with aspiration which is being placed in the posterior commissure. The bougie of Eggar is in place, and the two threads coming from the skin are tightening very closely and very firmly that bougie of Eggar into the neovagina. It is easy to regulate or test the rigid firmness and tension on the two threads. At this stage excess skin flap must be removed in order to obtain a good appearance. Figure 7 shows the exit of the levator cannula

with catheter. There is no skin suture. The urethra is being sutured on the catheter, about .5 cm from the skin. Some kind of retraction must always be foreseen. Figure 7 also shows the drainage at the posterior commissure.

Eight days after surgery, the bougie of Eggar was maintained for 48 hours. The aspiration is also removed after 48 hours. The urethral catheter is maintained for four days. The management of the new vagina is being made by frequent and daily introduction of fingers of small vaginal retractors. In the next few days permeability of the urethra must also be maintained by daily introduction of catheter and making sure that there is no stenosis that it is completely patent. With the catheter, the urethra is immediately introduced at the appropriate place during the final step.

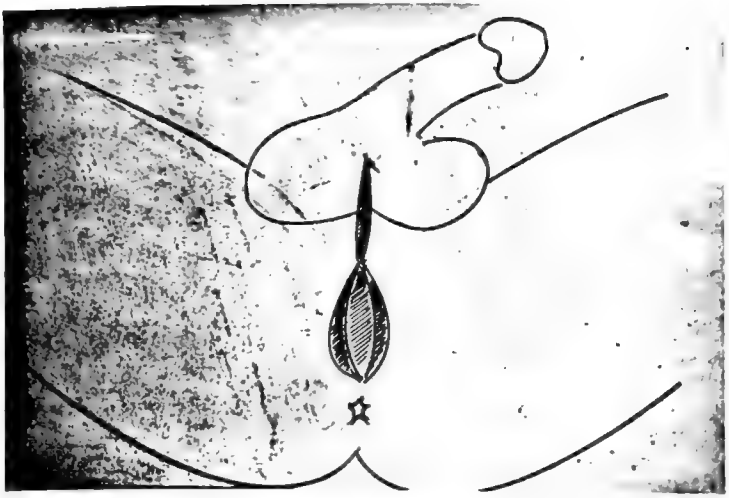

Figure 1. Incision

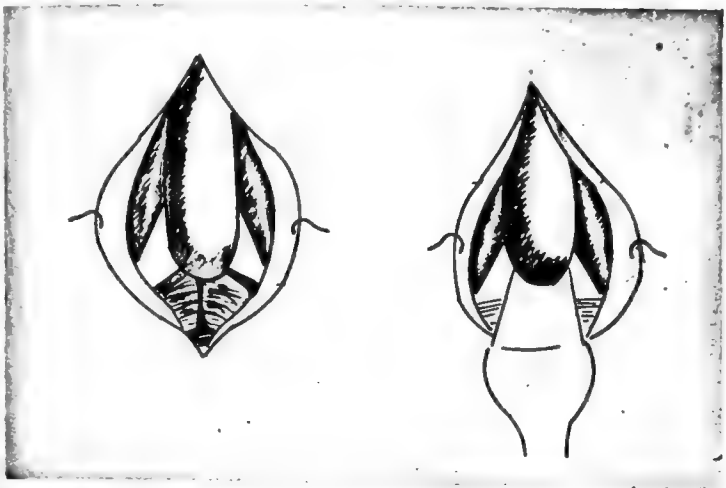

Figure 2. Position of urethral bulb and corpora cavernosa penis.

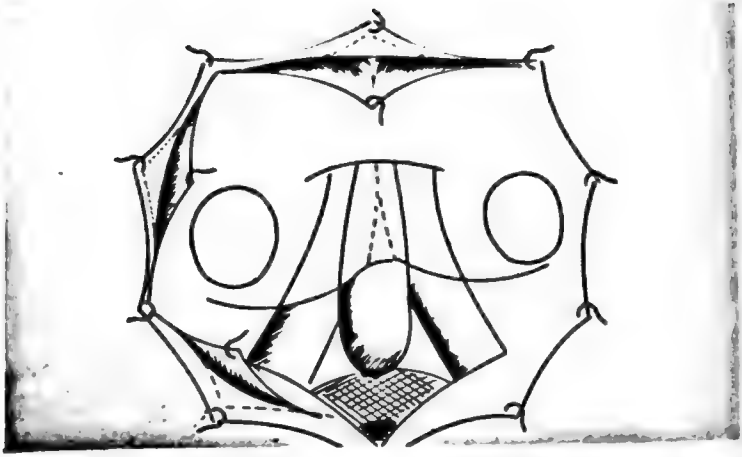

Figure 3. Position of skin flaps.

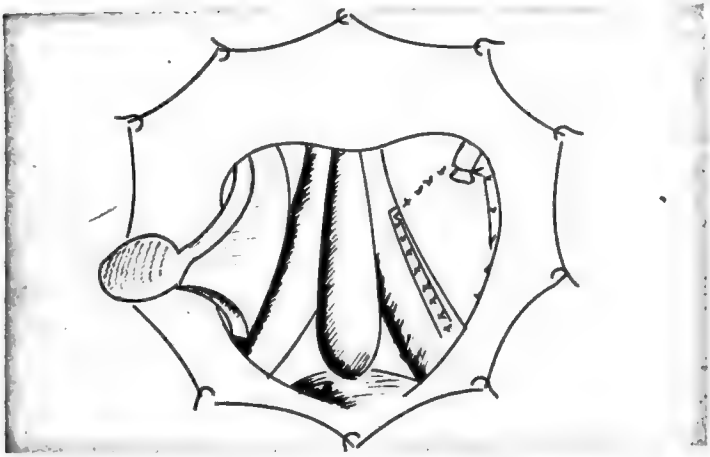

Figure 4. Orchiectomy.

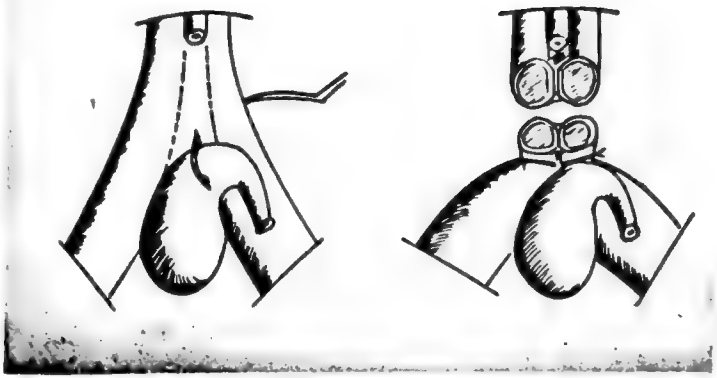

Figure 5. Transsection of urethra proximal to bulb and excision of corpora.

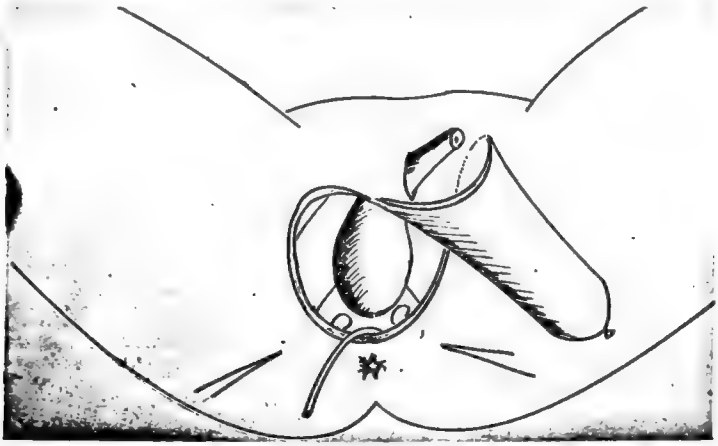

Figure 6. Penile skin invaginated.

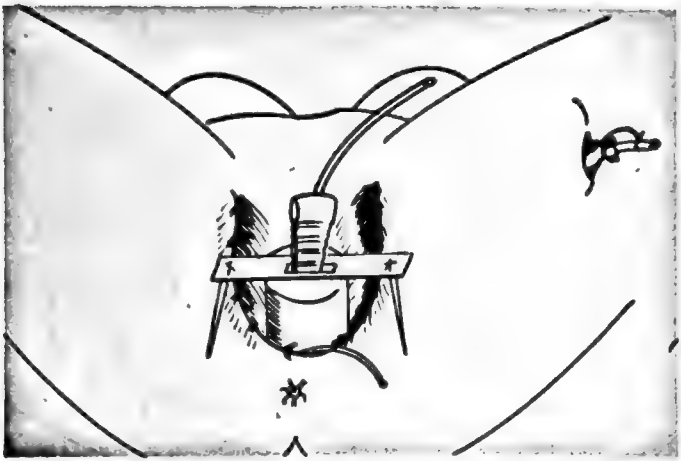

Figure 7. Stent in vagina.

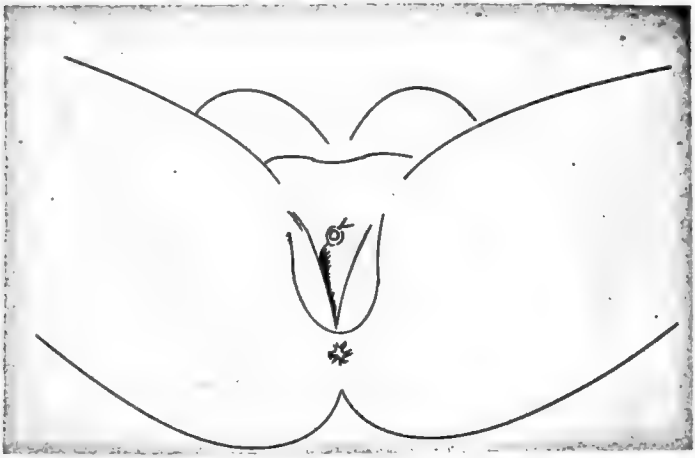

Figure 8. Postoperative view.

VII Patient Rehabilitation: Alternative Methods of Therapy

Economic, Psychologic and Social Rehabilitation of Male and Female Transsexuals Prior to Surgery

Ira M. Dushoff, M.D.

Six years ago there were only a few university gender teams. We at the Gender Identity Association in Jacksonville, Florida, set out to create a total team, along university lines, in a private setting. It took about three and one-half years to become organized. As a private team, with background information and help from the university teams, we had the advantage of starting from a different vantage point. As a matter of policy, we decided to use the process of evaluation as a screening technique, by offering evaluation and rehabilitation to anyone who was willing to comply with a few simple requirements. That is the way it has turned out. Rather than being in the untenable position of "rejecting" anyone, the entire process allows the patients to sieve themselves.

In order to study the transsexual phenomenon, the original teams had to institute research protocols, which incorporated specific definitions as to what and who would be studied. This introduced specific, but necessary artificialities into the developing understanding of the background and problems of these patients. In order to qualify for the desired surgery, the individual patients started telling a stereotyped story. In fact, the patients were lying. There were not giving a true story, for to do so would have eliminated them from consideration for surgery.

We started by making it clear to the patients that absolute candor was necessary; that we did not believe that "book" story. Since we felt that there was a wide variety of transsexuals, we had no specific definition. There were two immediate consequences. First, we were contacted by a large number of female transsexuals. Secondly, we were rewarded by hearing individual patients

state, during the course of evaluation, "I was prepared to lie about this point or that," or "my friends who have been through evaluations by other teams, told me not to mention this point or that."

Based on our experience, we believe that transsexuals come from a wide range of backgrounds and experiences. The natural sieving process involved in preparing and arranging for evaluation and rehabilitation tends to eliminate homosexuals and those who are acting out wish fulfillment ideas. We went further along the line by incorporating the patient into the rehabilitative process, by making them responsible for their own time and speed of progress. The rehabilitative process in a new gender role is something the patient must undergo. It is a self-rewarding process. We feel that leading the patient into a particular tempo of rehabilitation is often destructive. Helping the patient accelerate beyond his capability does not turn a poor candidate for surgical sex reassignment into a good candidate. The patient must take the initiative, and we will help, by providing back-up information and guidance. Often, nothing more than transferring school records, or discussing ways to go about obtaining a driver's license in the new name and gender role are the only "push" or help the patient needs to get started. The process of developing a new set of attitudes, or matching one's comportment to the new gender role can only be accomplished by the patient. This attitude on our part has proved to be of benefit to the patient; at the same time it has made our job easier. For instance, in some states, it is a tremendous problem obtaining a new driver's license. Yet we found people who had already obtained a driver's license in their new gender role, on their own. In some cases, they had already obtained a legal change of name. They were already doing the things that other patients said could not be done. By treating the excuses as such, we found that we were able to stimulate the patients to get out and start fending for themselves. In short, we make the patient a partner of the treatment team. We are not concerned with the patient who says, "my breasts are as large as your head, and I cannot live as a male." We have had patients whose breasts were larger, who not only lived as a male, but married as a male, in a situation where the wife did not know the true sex of her husband. Overcoming the obstacles involved in shifting gender roles helps the patient create a new identity. It is our belief that anything we do to spoon-feed the patient simply slows down the necessary readjustment with the real world. As a consequence, we are not manipulated by the patient, as we once were. We are there to provide information and suggest techniques as to "how to do it." We will arrange for a confidential transfer of records. But in general, the patient must do the work.

Unfortunately, in order to accomplish the creation of a new identity, it is absolutely necessary for the patient to lie about specific facts; we believe that it is our responsibility to help support these necessary lies. Their driver's license must be changed. Their educational records must be changed. Their permits or

licenses to work must be changed. In each case, if the change is not accomplished in a confidential way, their new identity will be compromised, and seriously interfere with their ability to be accepted into the real world. There is no reason why someone who is a hair dresser, or a teacher, should not be able to continue as a hair dresser or teacher with the appropriate change in their state license. It is easy, at least, in the Florida area, and we have handled this type of problem by long distance phone in every area of the country. It is easy to get colleges and high schools to transfer records, and set up employment situations, if the problem is discussed with the person at the top.

As a result of our emphasis on rehabilitation, we have repeatedly watched the overpowering pressure for "surgery now" gradually replaced by a concern for their own individual long range goals. It is quite common for patients who are finally cleared for surgery to defer that surgery until they have completed college or trade school. At the start of the evaluation process, they were saying that surgery should have been done a month ago; now, when everything is pointed towards their final goal, and surgery can be accomplished "tomorrow," they will make arrangements to defer surgery until the next school vacation.

This experience has led us to the concept that surgery is not rehabilitative, in and of itself. Surgical sex reassignment is only one part of the rehabilitation process. Surgery does not make a poor patient into a good one. Surgery should come at the end of the rehabilitative process, as confirmation of what the patient has accomplished, on his own, with our help.

A major problem faced by many of our patients, is that their school records are unavailable to them as references. A call to the registrar or principal or other high official of the school, by a physician member of the team will resolve the problem, if certain points are covered.

"One of my patients, who is one of your former students, is a transsexual, and is undergoing rehabilitation prior to surgical sex reassignment. Transfer of educational records is one of the big problems involved with establishing a new identity, and this is where you can help. I would appreciate it if you would set up a mechanism so that requests for information in the new name will be confidentially handled. Otherwise, the clerks may inadvertently use this information to destroy a person's ability to rehabilitate himself. The record transcript must go out in the name of the new identity, and not in the original name and sex. We will do two things:

(1) Certify that the individual transsexual is the same person as the student that went to your school.

(2) In those schools that require it, we will see that a copy of the legal name change is sent by the patient."

We have never been refused help on this basis, even though it means a change in the sex designation on the transcripts, or at least leaving that

information out. Other problems can be handled in identical fashion, keeping the information about the individual patient limited to a few necessary high officials.

In Jacksonville, it takes $150.00 and an attorney's time plus some records to go into judge's chambers to obtain a legal name change. We have heard of situations where fees in excess of $1,000.00 were charged, for a legal name change. The patient should be aware of the possibility of exploitation, in order to avoid it. The legal name change, plus our certification that the patient and the student are one in the same person, automatically transfers all the patient's records. They can now go to a new school. They can complete their graduate study or undergraduate study, and enter a more remunerative field of work.

Many transsexuals with a record of being poor or indifferent students become highly motivated when given the opportunity. One patient not only finished college, but went on to graduate school. The natural consequence of this experience is that we tend to disbelieve the patients who say, "You have got to operate on me now, because I can't earn a living in my new gender role, until I have had surgery."

It has been our general experience that the better patients want to live in "normal" society. They want acceptance in their new gender role, and do not want to make contact with other patients. Some patients would like to attend educational seminars, but their attitude towards self-help clubs or groups is rather negative. We have taken our lead in this regard from them.

As a private team, our fees are based on standard, justifiable insurance rates, and relative value studies. There is no loading of the fee because of the unusual nature of this surgery. As a consequence, we have been increasingly successful in obtaining payments by the insurance carriers. Although there is a monumental legal battle developing with one of the carriers at the present time, an increasing number of carriers are defining surgical sex reassignment as being properly within their contractual obligation.

It is difficult to compare fees between teams, particularly so in our case, since the total flat fee includes the anesthesia costs. But it is apparent that our fees, on a private basis, are at the low end of the fee range for this type of surgery.

We have not had the follow-up problems reported by other teams. Our patients have traveled long distances to return for late follow-up. No one has yet been lost to follow-up. One reason seems to be the specific nature of our relationship with the patient in terms of rehabilitation, and the patients seem to represent a different variety from those discussed by other teams. Our patients seem to understand the necessity of guarding against late problems and staying in contact with us. It is quite probable that our flat fee basis for postoperative care also contributes to good patient relationships.

If rehabilitation is the key to better results, the first response the patient receives from the team is the key to the development of that rehabilitation. Form letters obviously save time, but personalized responses to the patient's initial questions, and a clear definition of the steps leading to evaluation and surgical sex reassignment seem to be crucial. Some patients seem taken aback to find that all they have to do is follow a set of orderly rules. They cannot face it, and sieve themselves out of the process. For example, we have had 160 initial patient contacts in the past 2½ years. But only about 60 patients have supplied the necessary information and correspondence. And only 32 patients, or about one out of five, have actually come for evaluation. During the evaluation, we take a totally neutral attitude towards their ultimate diagnosis. Lies are easily discernible, and tend to delay the progression to surgical sex reassignment. This information is communicated to the patient at the outset of the evaluation process. Since our attitude is that even the confused homosexual needs rehabilitative help, which we will provide, the patients really work at the intensive four-day evaluation process.

Following the evaluation, the patient is advised as to hospitalization insurance, creation of identity, and their varied questions are answered. Those patients who must work on the prerequisites for surgical sex reassignment are told specifically what they must accomplish. Again, they are given a check list to measure themselves against. Those patients who are cleared for surgery have the surgery and fees discussed with them. Once a fee has been set, that fee remains unchanged, for that patient, for about two years, in spite of any subsequent fee revisions upward.

Discussion: Dr. Dushoff

We have had contact with 160 patients: 98 male transsexuals, 52 female transsexuals, and 10 patients whose original sex we cannot determine. Of the 160 patients, 32 have come to us for evaluation: 17 male and 15 female transsexuals. There is a tremendous difference in their motivation. The female transsexuals are very concrete, very straightforward, and know what they want, and what they are doing. Many of them have not yet made the step towards living as a male. They need rehabilitative help in getting beyond that point, but their progress is very straightforward. The male transsexual is more labile, and less pragmatic. She is liable to have impossible expectations, as Dr. Hoopes noted.

Of the patients we have seen, 18 have had some form of surgery. Twelve were operated on by our team, and six were operated on at some other place. Of the 12 operations by our team, four were on male transsexuals, and eight were on female transsexuals. Of the patients operated elsewhere, eight were males, and two were females. This gives a total operative experience of eight

male transsexuals and 10 female transsexuals. The statistical reversal is of marked importance in considering the incidents and etiology of transsexualism. It should be apparent that all who claim transsexuality are not really transsexuals. And it should be obvious that any definition of the etiology of transsexualism must include the female transsexual, as well as the male transsexual.

* * *

When a patient comes to see me for cosmetic correction of a crooked nose, it is my obligation to elicit a complete history, as well as examine the patient. The patient may say, "This nose is interfering with my social life," when the real problem is halitosis, a miserable personality, or a hirsute upper lip. If the patient has unreal expectations for the results of surgery, I am entitled to say, "I'm sorry, but I cannot help you."

If I have any obligation as a physician, in that situation, it is to avoid an operation that will not help the individual patient, and may be psychologically dangerous. The same situation exists in transsexual surgery. The patient's stated desire for surgical sex reassignment is totally inadequate as the only, or major reason for surgery. Contrary to the statements we have heard from the "consumers," this field of medical endeavor is no more a "buyer's market" or "seller's market" than any other field of legitimate, ethical medical or surgical treatment. To have a "consumers panel" in a developing field of professional concern, where the physicians are groping for improvements in the standards of care, completely misses the point.

* * *

The experience of the Gender Identity Association has paralleled that reported by the Stanford team. It may seem unusual to have plastic surgeons like Dr. Laub and myself involved in the pursuit of "rehabilitation" rather than surgery. Yet, we are vitally and deeply involved, because we feel that rehabilitation of the patient is the most important problem in treatment of the transsexual.

In the short space of two years, our understanding of this field has improved, so that the importance of a specific definition has receded. The literature is filled with first and second generation operations, and third and fourth generation operations are being prepared for publication, so rapid are the advances in this field. In 1973, the important subject for our concern, it seems to me, is proper rehabilitation from one sex-gender role to a new sex-gender role.

* * *

In the last few years, many new teams have started. Other teams are in the process of being organized. The original teams have undergone many maturations. All of the teams have run into common problems. We thought that many of these problems had more immediacy and importance for the

Gender Identity Association, because we existed in a private practice situation. We have had to educate our peers, colleagues, hospitals, and ethical committees. To our surprise, we discovered that the universities have identical problems with peers, and identical pressures.

The need to remove the rehabilitation of transsexual patients from the realm of sensationalism should be apparent. At the current time, anyone who submits an abstract on his experience with one or two cases of surgical sex reassignment will find his paper the "sensation" of a meeting. There are those who are exploiting this situation. Most of us, with more extensive experience, are talking to surgical and lay groups about diagnosis and rehabilitation, and only incidentally about surgery.

Many feel that there is a need for closer ties and communications between the teams. We know from our own experience that each team sees a different side of the same elephant. Without question, the average patient we see is not the same type of patient that other teams see. The characteristics of the patients we see have undergone a gradual but definite change, but our experience has never been with the specific types of patients reported in the literature. Dr. Rish has confirmed this point with his observations about the patients he has seen. In large measure, this is due to specific differences in research protocol or definition as to the type of patient each team will consider for surgery. For instance, if your definition excludes transsexuals who have been married, or who are minors, and ours includes such patients, then we are going to get a different population load. Similarly, if your definition excludes female transsexuals, or surgery on the part of your team stops short of complete phalloplasty, and our team specifically includes care of the female transsexual, and as a matter of policy insists on phalloplasty and micturition, then we are going to have a different experience to report. We have, therefore, come to the conclusion that further maturation in the field of transsexual care and surgery will only come about when all of us find some way to meld our experience and create inclusive definitions and standards of care. Further attempts at definition and requirements for surgery, from a single standpoint, seem inappropriate at the current time.

Role of Public and Private Agencies in Transsexual Rehabilitation

Marie C. Mehl, Ph.D.

The Erickson Education Foundation has surveyed the state welfare and vocation rehabilitation agencies throughout the United States and found that none responding in the survey has ever paid for electrolysis, hormonal therapy, and, of course, transsexual surgery. However, some progress has been made. A year ago, we approached vocational rehabilitation agencies at the federal level. Quite by coincidence during the time we were in Washington, several letters were received from transsexuals asking for help. Dr. Brinkley and Dr. Lloyd became interested in this area of need. They asked if I would write an article on transsexualism to place in a medical bulletin which deals with specialized areas, telling how to recognize and help the transsexual. Actually, I am making a plea to involve all kinds of paraprofessionals as well as professionals when you have workshops where it would be appropriate for then to attend. That is what we are trying to do at the federal level. I wrote an overview of transsexualism to be presented in their medical technical bulletin which eventually will be distributed to all the state agencies.

My proposal for the appropriate role of vocational rehabilitation agencies was: 1) Transsexualism constitutes a vocational handicap. Persons well trained and capable in a sex-oriented job have to give up their professions and then be retrained in a new vocation. Take, for instance, an anatomical male transsexual who has a masters and ten years of teaching experience. Currently, in most states, he must seek a new vocation in lieu of being able to change transcripts and furnish valid work records. When word gets around that this person has changed sex, he or she probably will not be allowed to teach small children and will need retraining.

Transsexualism cuts across social and economic status boundaries.

Transsexuals can be helped to be self-sufficient, thus taking them off welfare rolls. This is the primary interest of vocational rehabilitation–to get people off the state welfare rolls, not to force them to work at a level below their vocational potential. How can vocational rehabilitation units identify the transsexual? The transsexual will usually identify himself as experiencing gender role confusion. Frequently, he will define his own problem as transsexualism.

Vocational rehabilitation units should be sure that the client presenting as a transsexual is sent to a knowledgeable source for his evaluation. Diagnosis of the transsexual requires professional experience in gender dysphoria. A team evaluation is the most satisfactory, even if it entails sending the client out of the immediate area for diagnosis.

The newly diagnosed transsexual is required to live in the role of the opposite gender for one year. Rehabilitation can facilitate the client's transition during this period in many ways. One is by retraining the client for vocation appropriate to his new gender. It may be difficult for the vocational counselor who is unfamiliar with transsexualism to understand the client's need to cross-dress. However, this premise must be honored once a professional diagnosis is given. The client who is inexperienced in living in the opposite gender role may require training in a "neuter" vocation, such as paramedical skills or other occupations suitable to either sex, until he or she has mastered the opposite role.

During this transitional period, some clients can be helped by training in speech, dress, and mannerisms in the new gender role. This is a highly individualized area in which many transsexuals need no assistance; they merely do what comes naturally. Others are not so fortunate.

Most physicians diagnosing a condition as transsexualism will recommend hormonal therapy to be continued for life. Transsexual clients who have had difficulty establishing themselves due to societal response to their differences may not be able to afford this hormonal treatment. Here vocational rehabilitation agencies could be of maximum benefit in aiding the client to become self-sufficient. Hormonal treatment has a tranquilizing effect and allows the client to better mobilize his resources. In addition, physical and psychological changes are achieved.

Electrolysis is imperative for the male to female transsexual. The evaluation team of experts may recommend the patient live as a female. Vocational rehabilitation agencies may find the transsexual a female job, but if a four o'clock shadow appears daily, the experiment is futile. Electrolysis is expensive and beyond the reach of some transsexuals. It is a valid vocational handicap and not a mere cosmetic consideration.

Procuring the sex reassignment operation itself would seem justified in some cases. Some preoperative transsexuals, attempting to live in the role of

the opposite gender, are literally immobilized by fear of detection. Problems such as which public toilet to use, what would happen in cases of sudden hospitalization, or an arrest, etc., render the client unable to experience his own full potential.

Supportive psychological counseling during the transition period is an adjunct to quicker adjustment. Hormonal therapy, job training or retraining, role training, electrolysis, and the sex reassignment operation are always vocational rehabilitation agencies can help their transsexual client to self-sufficiency. In many cases, the transsexual client's inadequacy and need for help stem from social pressures. The transsexual is a vocationally handicapped person, capable of rehabilitation and self-sufficiency. Vocational rehabilitation agencies wanting names and addresses of physicians and professional consultants with expertise can contact the Erickson Foundation.

There has been a lot of progress made, in that individual vocational state rehabilitation agencies are training people to be adequately self-sufficient in the opposite gender role. They are still not paying for hormonal therapy, electrolysis, nor the operation. The discretionary powers of our agencies become clear when it is seen that they really are picking and choosing out of prejudice and lack of understanding. For instance, a psychiatrist can state that a person suffers a personality disorder because his ears stick out, and vocational rehabilitation will pay to fix the ears. Now this is a cosmetic problem. So the discretionary power and the selective justice aspects of agencies will become clearer as vocational counselors become conversant with gender dysphoria.

I would like to give another example which illustrates this discretionary power that exists in our helping agencies. Cuban welfare paid $450 for the Jacksonville team to evaluate a youngster; all six or seven doctors came out unequivocally with a diagnosis of transsexualism. However, state welfare has done absolutely nothing since that diagnosis. This is a clear example of prejudice. They will not help with hormonal therapy, electrolysis, nor the sex reassignment operation, thus rendering the diagnosis futile.

Discussion: Dr. Edgerton

I think we are all here with a concern for the transsexual and a desire to help him, but I would hope that we do not get too single-minded in our desire to see all society embrace these viewpoints. In particular, I am concerned about the tendency to confront agencies such as insurance companies too hard, and too fast with this definition. Transsexual surgery might well be considered in the same category as cosmetic surgery and for the same reasons. Perhaps surgeons would be the first to say that any of us who deal with cosmetic surgery in any way know that such surgery is neither unjustified nor illegal. It is not for either of those reasons that aesthetic surgery is not covered by

insurance companies. It is not covered for essentially the same reasons that the health insurance does not cover tuberculosis, or mental disease, or other types of chronic disorders that are so expensive that premiums for insurance companies cannot possibly encompass them. For the same reasons, I think we must recognize that at the present time, transsexualism produces such economic dilemmas for insurance agencies that they are naturally going to resist covering surgery of this type within their premium. I do not really think that we should try to make a battle for or against the transsexual with insurance companies.

Total Management and Responsibility for Transsexual Patients

Donald R. Laub, M.D.

In an over-simplified classification, two categories of patients present in the preoperative phase:

1) Patients who have lived successfully for many years in the gender of their choice and who have demonstrated success in life as judged by parameters such as marriage, employment, credibility, and subjective happiness and freedom from sociopathy.

2) The other group includes patients who have not enjoyed success by those parameters. Many have recently moved to our area from great distances and have lived their life in the gender of their anatomy (rather than gender of choice). They may have rather impulsively made a recent decision, e.g., "to be female" based on a lifelong desire. Some patients in this category come from a rural area, large in stature, wearing a miniskirt, jobless, not passable as females, and presenting as entirely inappropriate surgical candidates. They may be forced to be manipulative, a little psychopathic, or even sociopathic in their attempt to reach their goal of gender reorientation.

Several years ago, all our attention at Stanford was focused on category one patients, those who were successful, self-rehabilitated, capable of economically sustaining their program, and who, more than likely, would fill our postoperative statistics with success–in proving that the surgery is helpful in patients' lives and therefore "medically indicated" with moderately low incidence of complications.

On the other hand, we do have some responsibility to category two patients; i.e., those who have recently made a decision to assume the gender of choice, have not achieved success in multiple parameters, and do not present as prime rehabilitation candidates.

In taking some responsibility for the rehabilitation of this category of patients, a comprehensive program is necessary. First of all, these patients require attention to grooming. A modeling supervisor from a large department store or some other emphathetic person can participate by advising on good taste in clothes, deportment, modesty, and feminine manners and mannerisms. Patients need to be instructed that being very sexy is not all there is to being feminine, and that being a nice person with poise, manners, and feelings for others is also part of the "core" of the female.

Secondly, since the financial responsibility for this rehabilitation in the United States is on the shoulders of the patients themselves, we can synopsize rehabilitation to one concept—getting a job for the patient. The Department of Vocational Rehabilitation in each state is, I believe, empathetic in this area, and has been helpful in retraining patients in more feminine jobs. A cadre of successful postoperative patients can be of great assistance in obtaining female jobs. Some patients may even be encouraged to promise preoperatively to assist others in obtaining employment when they themselves become postoperative.

Is a halfway house or a halfway situation part of the rehabilitation scheme for category two patients? The halfway house is functional for patients who are completely down and out or need advice and support from their peers in order to get it all together in their heads. We cannot forget that the objective of each patient is to be *not identified* as a transsexual. Therefore, they would rather not be in a halfway situation very early in their rehabilitation process, because affiliation with the group identifies them as a transsexual. We have found that it is much better to place patients in a one-to-one situation; e.g., in a successful postoperative patient's family or home. In this way, they are not identified as a transsexual, but rather can identify as a normal female with no gender problem stigmatization.

Additional parts of the rehabilitation program can include:

1) Counseling from a postoperative patient on a one-to-one basis—a gender dysphoria counselor;

2) Early contact with an attorney to obtain advice on name change, change of documents, marriage, etc.;

3) Contact with the Police Department's "community liaison" officer to become familiar with the local statutes regarding cross-dressing;

4) Supervision of endocrine feminization program with a physician skilled in this area, who is able to differentiate other diagnostic categories such as hypogonadism, chromosomal masochism, intersexuality;

5) A "needs-assessment" from an experienced psychiatrist to counsel patients on which resources of the rehabilitation program may be of benefit to them, as well as advise the treatment team regarding the patient's potential and the patient's degree of narcissism, manipulativeness, psychopathic drive toward the goal, and sociopathy.

The above four characteristics are useful criteria in determining the manner in which the treatment team deals with the patient. For example, it is useful for the nurses and the patient alike to know that narcissistic, super-manipulators may have a tendency to postoperatively complain about their "service" such as whether the television is turned on right or whether the resident physician is giving enough analgesic medication. These patients will be well served to be advised to answer to the treatment team only such individuality restricting answers as "yes, sir" or "yes, ma'am" and nothing else.

After a patient puts himself through these prearranged hurdles for a two-year period of time, he has undergone a certain degree of behavioral modification, that is, rehabilitation or conformity to society's norms as a contributing member. This is, of course, the objective of each patient—to obtain a better life by entering the mode of life which is self-prescribed by the gender of his choice.

Surgery, therefore, is not "sex change" but rather only a rearrangement of one aspect of the patient's total life. Surgery merely confirms what the patient has already proven by a therapeutic trial of two years of complete and successful cross-living.

It is not surgery, therefore, that is rehabilitative, but it is the program itself—of which surgery is only one small and final part—that is of patient benefit. Perhaps, therefore, we should say it is a psychiatric program of behavioral modification that has treated the patient, rather than surgery.

We are now able to prepare to answer the questions: 1) Is psychiatry really worthless in the rehabilitation of gender dysphoria? Or is psychological behavior modification the treatment? 2) Will we be able to, at some time in the future, rehabilitate a patient to the point of not requiring the final step of surgery? 3) Are we able to help the 80 to 90 percent of the patients who apply to programs but are not surgery candidates?

Another area that I would like to address myself to is that of the category one patients, the patients who are self-rehabilitated preoperatively and are treated surgically in an uneventful manner. Perhaps we have no responsibility for following these patients for a long period of time. Since the patient is successful, she desires to disappear from the transsexual identity to become a normal female. I do believe that here we have a responsibility to the larger group rather than to the individual. We can gain a great deal of information by following these patients to determine the answer to the question: Does surgery improve the quality of life of a patient who presents with this syndrome?

Furthermore, I suggest that we have some responsibility to determine how our patients are doing postoperatively. A suggested format is: 1) *psychological.* Is the patient *anatomically* satisfied with the operation and does the patient subjectively feel that the operation was successful? In our follow-up

study, which ranges from one year to five years in duration, we find that the patients are satisfied with the decision to have surgery in 100 percent of the cases. 2) *Sexual.* Are they able to participate in sex? Of 30 patients studied, 24 of them have been able to participate in sex. As a subheading in this category, do they report that they have orgasm or sexual climax? Of the 24 patients, 18 reported orgasm. Thus, patients do have the ability to have orgasm in a certain percentage of cases. 3) *Employment.* We should follow these patients to determine how they are doing in respect to economically contributing to society. None of these patients has been incompetent in the employment sphere. Of the 30 cases, 100 percent are employed and not on welfare. We are also very happy to report these statistics. Of all these patients, 80 percent preoperatively were involved in prostitution. Only 20 percent have been involved in prostitution postoperatively.

In summary, in trying to answer the question, "Is surgery the proper treatment for patients who present with a certain type of symptoms," our present opinion is that if you load the dice and select patients who are already successful preoperatively, surgery does not harm them. We do not know whether "surgery itself significantly rehabilitates the patient." We are beginning to feel that the preoperative program rehabilitates patients to a greater degree than surgery, which merely confirms that the rehabilitative program has been successful.

We would like to make a plea for taking some interest in the preoperative and postoperative follow-up and responsibility in these areas.

Discussion: Dr. Edgerton

The physically inappropriate patient, seeking conversion to the feminine state, is interesting. I have requests from a physical male, 6'7" tall and weighing 230 lbs, who wants to be a female. I cannot help but wonder very seriously whether we should go ahead with this, even though other indications show a dominantly feminine psychology. Yet in other areas of plastic surgery, the plastic surgeon has learned painfully and slowly that the degree of anatomical change resulting from surgery may not be particularly correlated with the effect on the patient's body imagery. I am not at all sure that the decision for surgery should really be influenced by what you and I as doctors think of as inappropriate physical characteristics. These features may be totally irrelevant to decision-making about sex conversion operations, if the motivations and the needs of the patient are otherwise sound.

The Role of Counseling in Rehabilitation

Sandra Jordan

One of the principal concerns of this conference has been rehabilitation. I agree with rehabilitation and believe it is highly important. Rehabilitation can involve many facets, including counseling and rap sessions. But central to all rehabilitation is development of the individual's understanding of his or her particular social position. Cross-dressers must understand why they continue to encounter difficult situations in our society. It is important to rehabilitate them so that they can better understand their social position.

The term which has been coined to deal with the concept of cross-gender identification in a progressive way is *gender dysphoria syndrome.* Prior to this time, I have always felt that gender identity was referred to exclusively as either transvestism or transsexualism. But gender dysphoria syndrome is a better term, because it is my personal belief that practically every individual in this society suffers from it to one degree or another. It all depends on which gender characteristics you are talking about.

If we are talking only about dress, then it is obvious that the vast majority of men do not suffer from the syndrome. However, if we wish to talk about emotional responses, then there are many men who react emotionally in situations in ways which have been classically defined as feminine, e.g., unaggressive and passive. There are many "heterosexual" males who are passive in their emotional responses—in other words, they suffer from gender dysphoria syndrome.

The term gender dysphoria syndrome is helping to broaden the concept of what gender identity or cross-gender identification is. Anyone can experience some degree of cross-gender identification. The question before the transsexual therefore becomes: How extensive is my personal cross-gender identification? This is an entirely new way of viewing the question of gender,

with significant consequences.

In dealing with individuals at our counseling service in Seattle, I find I need yet another new term. The term which I propose to coin is gender dysphoria phobia. The major functional and emotional problems of those people we deal with in counseling—the cross-dressers and those with gender dysphoria—stem from society's attitudes toward them. To ignore this fact and to ignore the way society deals with these people is to have a totally ineffective rehabilitation program. In other words, if rehabilitation really is the key word for 1973, and if we are truly going to rehabilitate, we must rehabilitate in a way that is going to be constructive. To do that we must help cross-dressers understand their position in our society and why it is that way.

There is a significant difference, therefore, between the way we deal with individuals at the gender clinic in Seattle and the way many physicians have been dealing with them. Jim Campbell has presented the medical model, with its implication that the patient is sick. At the Seattle Counseling Service, we do not imply that at all. If we imply anything, it is the reverse, that most people in our society suffer from gender dysphoria phobia. That is to say, men are very freaked-out by other men who wear a dress. The inability of most men to wear make-up indicates to me that for a man to be feminine in our society, or for any of the men in this room to be in any degree feminine would represent an attack on their own self-concept. They have an inherent fear of having any cross-gender identification. In 1973 and the coming years, we will have to deal with the phobia of cross-gender identification and getting people to understand that phobia.

In summary, I would like to briefly describe the functions of our gender clinic in Seattle. I want to make clear, first of all, that we do not deal exclusively or even primarily with transsexuals, i.e., people who want to have a sex change operation. We deal with anyone who has some degree of cross-gender identification and is seeking help. We do not perform the conversion operation. Our functions are solely to: hold rap sessions, where cross-dressers come to discuss their problems; make referrals and inform people about other gender programs throughout the world; prescribe hormone therapy, which is administered by Jim Campbell at the nearby Country Doctor Clinic; educate the community through speaking engagements at colleges, high schools, and before other concerned groups, where we discuss what it means to have some degree of cross-gender identity in our society today; and counsel and educate the person with cross-gender identification.

All of the services we provide are geared toward helping sexual minorities exist in a society that wishes they did not.

Discussion: Sandra Jordan

I think that when talking about rehabilitation, the question which has

been dealt with to some degree, but minimally, is the question of economics. All of our services are provided free, because we recognize the problems that these people of a sexual minority face due to their economic oppression. The economic realities of these people cannot be ignored by persons of higher social position in this country.

The Recognition and Management of Transsexuals and the Need for a Half-Way House*

Jayne E. Waterman and John H. Waterman, M.D.

Probably the major factor in directing our interest toward the rehabilitation of transsexuals was that our first contacts with them were social rather than psychiatric. In 1967, a transvestite was brought into court for a mental hearing. He was hostile and belligerent and with his attorney wanted to be sure that the two committing psychiatrists knew something about transvestism. He was assured they were familiar with it.

To make a long story short, a transvestite shipwelder was involved in an accident, had been drinking and had shown police officers his feminine identification, which was membership in a transvestite organization. He was not committed to the state hospital. Instead, I volunteered to see him and his wife in the Multnomah County Mental Health Division Clinic, of which I was then director.

It did not take long to determine that this man was happily married and the father of a little girl. He had severe conflict in the past over his transvestism, which had resulted in one divorce and a voluntary commitment to the state hospital which gave him no help. In his second marriage, he had explained his transvestism to his fiancee before they were married. She accepted it and went with him to occasional transvestite parties.

When he and his wife finished at the Clinic they invited us to a New Year's transvestite party in Seattle. We accepted, and it was at this party we met our first true transsexual. He was a professor of history at a community college in Washington. Although at the time we did not recognize he was a true

*Read at the Interdisciplinary Symposium on Transsexual Disease, Stanford University Medical Center, February 2, 1973.

male-to-female transsexual, we nevertheless struck up a friendship, later met his wife and family, and then became involved in his problems.

About this time, and during Dr. Pauly's sabbatical leave, I began to get referrals from the Erickson Foundation, I became psychiatrically and medically involved with the patients, but my wife and I continued to recognize their social needs. We began to take some of these patients into our home.

Our first experience was almost a disaster. The patient, she (then he), was the manager of a food market, had been married before, and had children. At one time, in the midst of a hysterical reaction, she left and went back to the state hospital where she had been before (when she was a male), only to return the next day. We kept her for a month or more. During this time she discarded all her male clothes and insisted she would live completely as a female. Mrs. Waterman started working with her, taking her shopping and to lunch, and helping her with make-up, dress, and other things. As she became more confident, she became more demanding. She would borrow small sums of money and forget to pay them back. She accepted favors and food with little acknowledgment of help. Eventually, she enrolled in a nurse's aide course at the local community college and began working as a nurse's aide. Presently, she is in nurses' training. She has had her reassignment operation, but is still dependent, demanding and exploiting.

It was after this first experience that we became more sophisticated. As we saw more transsexuals and homosexuals, we began to define our criteria for true transsexualism. We had some sociopaths as well as lesbians and finally found, through our association with these people, that the true transsexual was one who really wanted to change gender and take the bad with the good. One of our so-called transsexuals who helped us in establishing our definition of true transsexualism, was Charlene. She was a sociopath with expert and highly manipulative powers who only wanted the glamour of feminism and none of its responsibilities. It was not that she did not have transsexual leanings, but she was unwilling to devote the necessary effort to attain her goal.

On the other hand, the first transsexual we knew—a history professor from Washington—was an entirely different person. She had experienced a great struggle through the years in defining her real role. We kept her in our home for a full summer. She was gracious, helpful with most housework, and although she was not as tidy as she could be, it was obvious she really wanted to be a woman. It was through her that we came to understand that the male-to-female transsexual, even though he can learn to cross-dress properly, modulate his voice, and use make-up well, still thinks masculine in some areas. In Val's case, she never thought of cleaning her ashtrays and would spread make-up and hair all over the washbowl in the bathroom. I finally pointed this out to her gently. She became disturbed, packed her things and took off for Seattle. In two days she was back, apologized profusely, and from that point

on we had no more trouble with untidiness.

For over two years our home was a gathering place for transsexuals on weekends. We lived out in the country on a farm on the Sandy River so there were not many other places to go. Mrs. Waterman would take them shopping. We would often go out to dinner or shows in the evenings. There were bull sessions ad infinitum, with all of the transsexuals expressing their views, their fears, and their aspirations. Mrs. Waterman and I would offer our comments. We were never anything but heterosexual, never too demanding, never too critical, and always accepting.

It became apparent, as we associated more and more with these transsexuals, that there were several factors in their lives which demanded serious consideration:

One was a devastating fear that they could never reach their goal of gender change.

A second was their need for medical supervision and reassurance. They were reluctant to wait for results of hormone therapy, and needed to be told not to expect magical results from this treatment.

A third and prominent factor was a fear of not being able to pass in their new gender role. This is where Mrs. Waterman helped them with shopping, dress and make-up.

A fourth factor was that they were so egocentric that only their own problems mattered. This handicapped them in being sympathetic with others. They expected everything, which made it difficult for them to be accepted by others whether the others are familiar with their problems or not.

There are undoubtedly many other factors involved in the social adjustment of true transsexuals. Our own experience makes it glaringly clear that all transsexuals need help in socialization, as well as in all other aspects, surgical and medical. It seems that there are two critical times in the life of the transsexual where they need help. The first is when they finally decide they must live in their chosen gender. At this time, there is a lot of doubt, a lot of fear, and they need lots of help and support. After they are once in the groove of their new role, they seem to do fairly well, but they are always calling back for reassurance. The second time of trial is just before the reassignment operation. Our experience is limited, but it seems that even though the transsexual has his course clearly set and has been successful in living for two years in his new role, the actual prospect of an irreversible operation produces anxiety for which he needs reassurance. After the operation, they still need help in social adjustment, dress, make-up, and conduct.

It is hardly conceivable that other psychiatrists and their wives can, or would want to, run a half-way house such as we did. We cannot do it anymore, at least for the present, because of our forced retirement. Although some of our patients still visit us in Roseburg, we do not have the facilities to have

groups of them in our home.

Half-way houses, in our opinion, are a must for transsexuals, both pre- and postoperative. The transsexual needs a place where he or she can live or meet with other transsexuals. They need the guidance and stability of a truly well-adjusted heterosexual married couple who accepts them completely. In this short presentation we shall not attempt to enumerate all the problems of developing a half-way house. One thing is certain—it takes money, because the majority of transsexuals have little of it. It takes proximity to a large metropolitan center, because the total number of transsexuals is small and widely scattered. Most of all, it takes personnel who are naive enough to be passive and accepting but also firm and insistent on house rules, as well as thoroughly satisfied with their own gender.

As a last comment, I must say that Mrs. Waterman has said about the Monday Clinic in Dr. Laub's department, "Our transsexuals are the best dressed and best behaved transsexuals that come there."

An Approach to the Artificial Phallus

Werner P. Schulz

In the past, probably quite a number of persons have thought of what it would take to come up with a workable artificial phallus. Tender, loving care was given to its outer form and resilience. Up to now, function was and still is the art of the inner activation of the phallus.

* * *

My design criterion was governed by the dynamics of intercourse: first, the various states of the softness in the outer plasticized shell of the artificial phallus and sufficient limpness of the mechanical inner structure during relaxation (Fig. 1); second, not only the softness or pliability of the outer shell but also a rigidity of the inner mechanical structure with a horizontal deflection of $\pm 12^{\circ}$ and 6° in the vertical position, which amounts to about 70 mm horizontally and 35 mm in the vertical plane for an overall length from base to tip of 160 mm for the artificial phallus. This freedom of motion and the resilience of the outer shell of the artificial phallus come very close to the performance characteristic in the erected state of a natural phallus. Also, the same built-in flexibility during the erection position of the artificial phallus keeps to a minimum the danger of injury or painful inconvenience during intercourse.

Two designs for the inner phallus were pursued. First, a straightforward mechanical device. The major features are three movable parts (U-shaped in cross section) which interlock with each other, a base plate, and a spring to secure the interlock position during the erection phase. The longitudinal slots in the U-shaped cross section also allow the phallus the previously-mentioned freedom of movement during intercourse.

Second, a hydraulic-mechanical device was developed with the same function. This system also has basically three moving parts plus the hydraulic system. The only difference between both erectors is that one is hand-erected and the other works hydraulically. The hydraulic erection cylinder is in the center of the three movable (collapsible) parts. A very thin (3 mm O.D.) in-line one-way valve is right in the center of the " ∫ " while next to it is the master cylinder for the activation of the inner phallus erector.

The actual dimensions seem to be rather large, but the parts can all be assembled in a normal-sized artificial scrotum. The function of the one-way valve is to limit the erection to about 10 minutes which means that after that, one has only 50% of the initiated pressure left. This means the phallus begins to come down. In case of extended intercourse, a stroke or two of the master cylinder will add to the time of activity.

Patient's Activity

A 26-year-old transsexual patient with the desire to be male was supplied with one non-hydraulic artificial phallus. After three months with intercourse three to four times per week (which speaks for itself about the performance of the artifact) and wearing it for 24 hours per day, it finally wore out. Inquiring about this, I found that, to indicate his manhood, he was wearing the phallus while riding horseback (his profession). After studying the remains of the artificial phallus, I reinforced the areas of excessive strain and stress. Two more models were produced. These models were redesigned to reduce the high strain and stress, which occurred mainly in the relaxed position, by applying prebound fiberglass and rubberized nylon webbing to those areas. I also gave him two alternatives: move the phallus higher during riding, or I would have to shorten it. He chose the first alternative.

The overall length of the phalluses produced was about 16 cm or 6 inches. Figure 2 shows a typical artificial phallus strapped on. The modus of attachment is multiple. The easiest way is a strap, but a jock-strap or very tight elastic pants (flesh-colored) seems to be preferred.

Redesign Considerations

Since the previous work was done on rather short notice (four months' time), the outer shell of the artificial phallus should be entirely redesigned to be more useful over a very long time period of normal use. The mechanical or hydro-mechanical inner activators seem to fulfill the requirements and expectations. All parts of the hand-operated erector and the hydro-mechanical version are made from stainless steel.

Implants

An orienting study on implants for impotent males was made about five years ago. The selection of the material for the erector tube was made by Dr. Laub at Stanford. The material is woven dacron. Also this device is hydraulically activated. It consists basically of two hydraulic vessels or containers which are connected through the previously mentioned one-way

valve. The whole unit could be totally implanted and the little ball shows up as an additional testicle in the scrotum. Test implants which were performed on cadavers worked fairly well.

In spite of the novelty of this device, more development needs to be carried out until final medical release is authorized for the use of implants in live males.

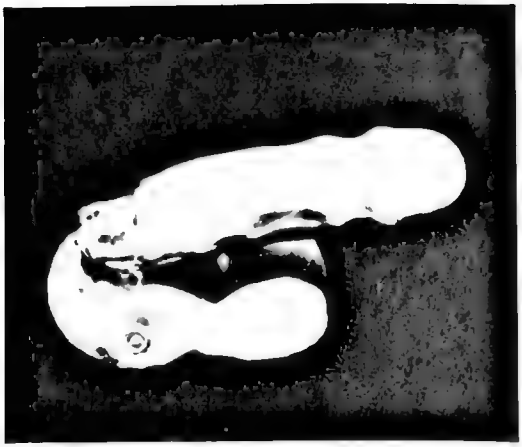

Figure 1. The artificial phallus in the relaxed state.

Figure 2. The artificial phallus strapped on.

Group Therapy as an Integral Part of Surgical Experience

W. Sadoughi, M.A.
C. Overman, B.A.
I. M. Bush, M.D.

Since sex reassignment surgery was begun in the United States, we estimate that more than 500 persons have undergone this type of surgery and hundreds more have applied. To date, surgical treatment appears to be the only method successful in reducing isolation, depression, despair, and attempted suicide by offering a more adaptive psychosocial and psychosexual adjustment. Unfortunately, uniform criteria in patient selection for sex reassignment surgery are lacking. The emphasis is on the evaluative aspects rather than on counseling and preparing the individual for surgery, with all its ramifications in the post-operative final stages of assimilation in the new gender role.

Early in 1972, approximately six months ago, the Social Evaluation Clinic Section of the Department of Urology at Cook County Hospital in Chicago made a refinement in the traditional transsexual evaluative procedure of social history taking, psychiatric interviewing and psychological testing. A new dimension was added—that of group therapy. Today we feel that group therapy is not only an integral part of the surgical experience, but the most important aspect of our program for the individual seeking sex reassignment surgery. The ultimate goal for members of the group may vary with the individual. Sex reassignment surgery is perceived as only one of the stages in the total process by some.

The group is made up of both males and females that have requested sex reassignment surgery. The authenticity of their motivation is not questioned during screening because the ultimate goal of the group therapy is "becoming oneself" and not necessarily surgery. The only criterion for exclusion at

present is psychotic behavior and thought pathology. Each group member represents a different stage in the process, ranging from the one who is ambivalent and confused regarding gender role to the well-adjusted transsexual who has successfully lived in the adopted gender role for 19 years. Some have received hormone therapy, breast implants, orchiectomy, and vaginoplasty from private physicians prior to becoming a member of the group. This pre- and postoperative group make-up facilitates information gathering and learning.

Group therapy is an informal exchange with a non-judgmental therapist who assumes an empathetic attitude and creates an interpersonal situation that enables the individual to discover patterns of adjustment. Reinforcement is utilized by appropriate interaction of therapist and patient variables. Furthermore, once the group frame of reference is established, it functions as a peer group which becomes an effective tool of reinforcement. The peer group pressure may become evaluative or supportive. Both are essential in a group therapy process.

Information is provided to the group not only by the group members and the therapist or co-therapist, but also by outside speakers experienced in such areas as urology, endocrinology, plastic surgery, psychiatry, legal counseling, and vocational counseling. Verbal content of the group varies from the concrete to the factual to the self-searching. Surgical procedures are recurrent topics of discussion and serve as a catalyst for self-searching and evaluation. As a matter of fact, following one such discussion, the group members volunteered their criteria for patient selection. Ego strength and life style were the two criteria most often endorsed.

To date, we have had to resort to independent judgment of verbal interaction in an effort to evaluate our group therapy. The initial comments such as, "Why do we have another third degree session?" have been replaced with, "I think I have grown in the last month," or "I feel that I have lost a great deal by trying to become a woman." Whether it is from social reinforcement in the group, insight, or processing newly-acquired information, the analysis of our patients' verbal behavior suggests that positive changes are taking place while the process of becoming unfolds. We hope that our future formal evaluation and follow-up will confirm this impression, not only that group therapy maximizes appropriate patient selection, but also helps to prepare the individual for surgery and post-surgical assimilation into society. At the same time, our group therapy sessions have made the clinic personnel realize the need for increased vocational counseling.

We hope that private funds will help us to make vocational counsel another new dimension in our program.

VIII Patient Rehabilitation: The Outcome

Follow-up on 74 Gender Dysphoric Patients Treated at Stanford

Patrick Gandy, M.S.

The Stanford University Gender Dysphoria Program is oriented toward efficient, comprehensive, and responsible patient care without high cost, without performing surgery on demand, and with the encumbrance of multiple diagnostic testing maneuvers. The goal of our program is complete patient rehabilitation.

Comparison of each patient pre- and post-operatively was carried out in an attempt to answer the question, "Does surgery improve the quality of life for certain gender dysphoric patients?" It was not possible to compare the surgical group against a meaningful nonsurgical control group because the successful patients were operated upon and the unsuccessful patients did not qualify for surgery.

Seven hundred sixty-nine patients were involved in the program; 74 (9.6 percent) underwent gender surgery. Fifty patients underwent surgery in the male-to-female direction. Of these 50, 38 patients had the original surgical decision made by our program; 12 were operated on after their surgical programs were begun elsewhere. Twenty-four patients were surgically altered in the female-to-male direction.

Postoperative scores were significantly higher than preoperative scores when all diagnostic groups were combined. No patient was significantly harmed by the surgery with the exception of one patient first operated on elsewhere. No patient felt that the operation was a mistake or expressed subjective unhappiness postoperatively. The one suicide versus homicide death expressed extreme happiness and had made considerable objective achievements when last seen several weeks prior to death.

Further analysis of the data was made to determine if transsexuals had greater adaptability than other diagnostic groups, effeminate homosexuals and transvestites. The most significant degree of change was noted in the

transsexual and effeminate homosexual group; there was no significant change in the transvestite group.

Other conclusions suggested by the data and clinical observation of these patients were:

1. The term gender dysphoria syndrome is offered as a generic diagnostic category to describe those who are so unsatisfied with their sex as to seek surgical therapy. Gender dysphoria includes: A) classical transsexualism indicated by history of prenatal programming of the brain and the behavior of the opposite sex; B) selected effeminate homosexuals who have greater ability to adjust as females than males; C) selected transvestites who have drifted into a situation similar to transsexuals, but do not have a lifelong history; D) individuals with delusions regarding their sexual identity; E) persons with neurotic thought impulses toward their own genitalia; F) sociopaths and psychopaths.

2. Surgery has been occasionally considered for the first three divisions of gender dysphoria syndrome—classic transsexuals, effeminate homosexuals, and transvestites, but not for the last three divisions. Follow-up does not indicate that transsexuals should be the only category considered for surgery. Indeed, it is probable that the diagnostic category is of much less programmatic importance than the patients' preoperative performance in a one- to three-year therapeutic trial in the gender of choice as judged by economic, social, psychological, and sexual success.

3. In an effort to maximize success in intermediate and long-term follow-up, and eliminate mistakes and decisions with this surgery, only patients who have already proven themselves successful prior to surgery can be accepted.

4. In another effort to maximize patient rehabilitation opportunities, a program can be offered candidates who have not undergone an extended therapeutic trial. The program can include advice and assistance in employment, endocrine feminization or masculinization, legal matters, police liaison, vocational retraining, and college education, as well as room and board with one of the postoperative cadre, a body-building exercise program for the female-to-male group, and a grooming and deportment clinic for the male-to-female group.

5. When specific goals are set in each of the above areas of the program, the goals become requirements. Then, fulfillment of the requirements constitutes a form of behavioral modification which appears in itself to be a successful form of therapy for this condition prior to and/or without surgery. Therefore, behavioral modification, a form of psychiatric therapy, is suggested as a possible alternative method of treatment.

6. Complications are frequent. Surgery on demand will probably result in disaster.

7. At this time surgery is not the proven treatment for gender dysphoria syndrome or for classic transsexualism.

Outcome of Hormonal-Surgical Intervention on the Transsexual Condition: Evaluation and Management

Charles Ihlenfield, M.D.

The phenomenon which we call transsexualism has been present since ancient times. It is only in our own time that medical and surgical treatment has become an alternative for these people. With increasing publicity given to some of the patients so treated, and with the increasing freedom of personal expression which has accompanied the contemporary sexual revolution, it is not surprising that the number of transsexuals who seek and obtain treatment has risen.

Now that our treatment modalities are fairly well-defined, it becomes more important to assess our results. In most areas of medical practice we try to restore the patient to his previous state of health. At times this treatment involves the removal of an offending part, while at other times it consists of helping the patient adjust or adapt to a permanent condition. Since all these types of treatment are involved in dealing with transsexuals, we should define our aims before we evaluate the results. Most patients seek help to come as close as possible to what they consider to be a physical expression of their true selves. Such treatment seems to go counter to our own devotion to physical normality. We must drastically alter a physically normal body. We risk the censure of our colleagues and boards of trustees. By agreeing to go along with our patients, however, we establish one parameter for evaluation of our efforts: how pleased is each individual by the outcome? Using the techniques of the psychiatric interview, we can often record the patient's subjective responses in objective terms.

Is the patient now happier as a human being?

Is the individual pleased with the results of surgery?

Is the outlook on life brighter than before?

Are interpersonal relationships better?

Has the individual been successful vocationally?

Is the individual accepted by family, friends and associates?

With these questions in mind what can we say about the results of our treatment? In 1966, Dr. Harry Benjamin reported on his series of 51 operated patients. He rated the results in the following way:[1]

Result	*Number*	*Percentage*
Good	17	33.3
Satisfactory	27	52.9
Doubtful	5	9.8
Unsatisfactory	1	1.9
Unknown	1	1.9

In reviewing 121 postoperative cases in 1968 (including Dr. Benjamin's patients), Dr. Pauly indicated that in properly selected cases a satisfactory outcome was 10 times more likely than an unsatisfactory outcome.[2] The university gender identity groups are doing follow-up studies. We expect that our own series will yield additional significant data when our new Research Foundation gets the time, staff, and money needed to accomplish the necessary work. At the present time our series of male and female patients with gender identity disturbances numbers 993. Of these, 882 are anatomic males and 131 are anatomic females. Some 222 males have been reassigned as females, and 55 females have been reassigned as males. To the best of our knowledge there have been eight deaths. One of these is known to be a suicide of a depressed patient who obtained surgery against our recommendation. An additional five deaths are attributable to drug overdoses which presumably were accidental. Another patient died of a malignancy which antedated her treatment for transsexualism. One patient died of a CVA.

There are a number of problems in doing a long-term assessment of sex reassignment. Perhaps the greatest difficulty involves reaching patients for the interviews and testing required for such a study. Operated patients eventually lose contact with the doctors responsible for their reassignment. These people have been miserable prior to treatment and want little association with the life they left behind. Unfortunately for our studies, we and our offices are a part of that past which undergoes repression.

Up to five years after surgery, our own patients report few regrets at the sex reassignment. Reactions of families have been good. The majority have found satisfactory work in the new role. Thus, for the short-term follow-up, Dr. Pauly's statement of five years ago still holds true. Our clinical impressions are favorable for those patients who have been reassigned for longer than five

years, although our follow-up has been less extensive.

In addition to those who obtain sex reassignment, there is a larger group who come for treatment but do not obtain surgery. Some are transsexuals whose intensity is low enough that they can live fairly comfortably without reassignment (but usually with some low dose intermittent hormone therapy) and make an adjustment by accepting their condition. There is another group in which the desire for surgery is great, but frustrated by lack of financial opportunity. This group often takes maintenance doses of hormones and lives in the desired gender role without benefit of surgery and in constant risk of discovery. Finally, there are those who certainly would be surgical candiates, but do not obtain surgery because of pressures from family, business or profession. For many of them, estrogen maintenance and supportive counseling have made life bearable, if not enjoyable.

The immediate result of selected sex reassignment for the adult transsexual is remarkably successful. Our patients appear happier and better adjusted socially, sexually, and vocationally. Patients who were depressed and withdrawn usually appear brighter and better able to deal with life after reassignment. Some of these people were severely depressed or suicidal when treatment began. In life terms, these results must be considered favorable, even though longer follow-up may show that for at least some of them we merely postponed an inevitable personality decompensation. As they grow older some may find the frustrations and disappointments of advancing years difficult to handle, particularly if their earlier experiences have failed to secure their identity and self confidence in the reassigned role. However, we have a small group of patients who did have reassignment only after reaching the late middle years. These people (in their late 50's and 60's) have felt that the change was worthwhile, even at their older age, so that they might enjoy in their remaining years the peace and human fulfillment they missed in all the years before. It seems unlikely that these patients will become disappointed and depressed by the time they reach the long-term follow-up stage.

The problem of long-term follow-up on transsexual patients is complex. Any projects in this area will require significant funding above and beyond what is currently available. A gender dysfunction registry, maintained on a nationwide, computerized basis, could give us invaluable assistance and information on an up-to-the-minute basis. Even were it possible to establish such a registry, we would still have to deal with the individual transsexual, who would likely be reluctant to be an active participant in an ongoing study. Some method of keeping track of these patients is essential if we are to speak with authority about the outcome of hormonal and surgical sex reassignment.

Statistics

Total gender identity patients		**993**
Males		**882**
TV's	about 30-40 of 882	
Females		**131**
Surgery		
Males	222 with vagina	
	20 with castration or castration and penectomy	
Females	55 with masectomy and/or hysterectomy	
Deaths		8
Females	1 suicide (with possible cancer)	2
	1 cancer, predating SR	
Males	1 CVA	6
	5 drug overdoses, none with notes, so motive unproven; on autopsy one who had had silicone injections into breast had breast cancer	

References

1. Benjamin, H., *The Transsexual Phenomenon.* New York: Julian Press, 1966, p. 123.

2. Pauly, Ira B., The current status of the change of sex operation. *J. Nerv. Ment. Dis. 147:* 465, 1968.

Experience at the University of Minnesota with Transsexual Patients

Donald Hastings, M.D.

Of 25 male to female cases we have had at Minnesota, the first was operated on in December of 1966, shortly after the Hopkins series began. We had a heavy caseload in 1968, and the last of the 25 patients was operated on in March of 1970. Hence, most of the follow-ups I will report on represent about a four-year postoperative evaluation; the longest is seven years.

The mean age of the 25 transsexuals was 27.6. One patient had been married before. This patient, our oldest, was 51 at the time of surgery and is the man, incidentally, who just two months ago was reported to us as having developed cancer of the prostate.

Our group make-up was affected by two factors. First of all, financially, we were able to operate under the usual ground rules at the University of Minnesota Hospital, whereby Minnesota residents are not billed for medical or hospital charges. Hence, we selected Minnesota residents whom we could treat as indigents from a fiscal point of view. Twenty-two of our patients came from a lower socio-economic group.

The other factor affecting our series was a long-term interest in sociopathy or psychopathy that one member of our gender committee had. At his request, we selected five patients with psychopathic tendencies to see what effect, if any, the sex reassignment surgery might have. If we have any one clear-cut conclusion to give you, it is that transsexual surgery does not benefit psychopaths.

In looking at the adjustment of our patient group from a social, sexual, and emotional standpoint, we used the college grading system--A, B, C, and D. "D" represented failure; "A" represented excellence. The patient failed emotionally if he had been admitted to a psychiatric section of a hospital, for

whatever reason, or if he had attempted suicide. The sexual category had the highest number of "A"s in it. The patient made a grade of "A" if during so-called heterosexual coitus—and this was subjective reporting, obviously—he reported multiple orgasms. Twelve of our patients did. If the patient reported the occurrence of orgasms routinely or more or less routinely during heterosexual coitus, he received a "B." If he reported the existence of orgasm with heterosexual coitus occasionally, but not routinely, he received a "C." Those reporting no orgasms received a "D."

At the top of the economic gradation were patients who were completely self-supporting in a reasonably good way. There was subjective evaluation here. Nine received "A"s. Four did reasonably well. Four were marginal, and eight were on welfare.

Postoperatively, of this patient group, 10 of the 25 had been married. Of these 10, four had been divorced and six were still married.

There are two cases I would like to discuss which were not included in our study group of 25. These are cases 26 and 27. One was a youngster of 23 who was studied in the hospital, accepted by the gender committee by the usual criteria, sent home on estrogens for a period of six months. He was scheduled for surgery approximately eight months later. On the Friday before his Monday admission, he called me saying he had had a religious experience the night before and had decided he was heterosexual after all. I invited him to come in the following day and talk with me. He declined, saying that he wished to have no more contact with transsexuals or people who were interested in them. What kind of religious experience he had, I am not prepared to say. I have not heard from him again. This was perhaps in December of 1968. My letters to him go unanswered.

Case 27 was a puzzling reversal. This was a man of 35 who was imprisoned for armed robbery. During his prison experience, he decided that he was a woman and not a man. When he was released from prison, he applied to us for sex reassignment, but was turned down by our gender committee on the basis of his prison record. He went home, tied a ligature around the base of his penis, and excised it with a straight-edge razor. He reapplied to our gender committee, saying he had gone about as far as he could be himself. While we were considering his case again, he completed the second stage with his razor by castrating himself. (He had been a medical corpsman in the Navy.)

After that, he came to the gender committee and said, "If you do not help me, I am going to kill myself." We thought we had sufficient evidence to take this man seriously, but being somewhat cautious, we asked six judges in Minneapolis to meet with the gender committee. They were appalled and said, "If you do not help this man, we will lose respect for you." So Dr. Colin Markland operated on him. A month later, this patient decided that he was not a woman, after all. He went back to dressing in pants, found a man's job in his

old machinist trade, and is about to be married to a presumably heterosexual girl.

The heart of our whole project at Minnesota is long-term follow-up to see how postoperative patients adjust to various aspects of their lives. At the three- to five-year period, we are beginning to see satisfactory adjustment. We have had no suicides, although one girl, after being rejected by a man she thought she was engaged to, put a .22 calibre bullet through her abdomen in a suicide attempt. After being brought to the hospital, she tore out her tubes for the first six hours and would not permit surgery. It was only when the jilting lover came back and implored her to submit to laparotomy, that she agreed to go into the operating room.

Socialization of Feminized Transsexuals

Thomas Kando, Ph.D.

I am concerned with examining transsexuals as social persons. My focus at the University of California, Riverside, has been on how transsexuals interrelate with others postoperatively. At the time of the interviews, the subjects had all been feminized from between two weeks to about two years. My conclusions remain tentative.

Transsexuals are very expert at handling stigma in interpersonal relationships, and they are able to teach those of us who teach others in society how to handle strenuous relationships. One part of my study consisted of a controlled comparison between transsexuals and an equal number of males and females selected randomly from the Twin Cities metropolitan area. I found statistically significant differences along at least five major variables.

A masculinity-femininity variable was measured with a specially constructed scale of 84 items. These items were primarily derived from the literature and measured cultural definitions of masculinity and femininity. Transsexuals were found to be by far the most feminine of the three subgroups, more so than normal women in terms of cultural definitions of femininity.

A second variable along which the three groups differed significantly was that of sexual conservatism, measured by a similar composite scale. Transsexuals were unanimously convinced that traditional sex roles were appropriate sex roles, i.e., they were the most conservative gender group.

A third area in which the three groups differed significantly was role strain. It appeared that transsexuals experienced a certain amount of role strain, but according to my indicators, females seemed to experience more than either males or transsexuals.

When it came to a fourth variable, sex definitions and definitions of

gender identity, I detected a tendency on the part of transsexuals to define sex and gender differently than normal males and females. There are many ways to define sex and gender, of course. Dr. Benjamin has enumerated them—there are biological, psychological, and social criteria. In terms of their choice of the basic criteria of sex and gender, transsexuals, males and females differ.

In terms of attitudes toward transsexualism, our fifth comparison variable, transsexuals imputed a greater degree of tolerance for their pathology to the general population than normal males or females did. They made more errors in judging this tolerance.

In addition, I was interested in distinguishing between transsexuals who passed from those who were exhibitionists in their new gender identity. I divided the group into two subgroups, one consisting of transsexuals who passed under most situations; for example, one respondent was married to a man who did not know. A second subgroup of transsexuals consisted of individuals who performed as strippers and night club performers; they not only overtly divulged their true identity, but exploited it financially. It was possible to discern four basic types. One was termed the housewife type, transsexuals who were most conservative, most eager to establish respectability. At the opposite extreme was the stripper type, transsexuals who performed in night clubs and frequently engaged in prostitution on the side. Two intermediate types also could be discerned; the aspiring housewife, who had not yet succeeded in marrying and settling down in suburbia, but who did aim toward such a goal, and the career woman who did not engage in the seamy areas of show business, but who worked in gainful employment and was not the typical middle class all-American housewife.

We compared the passers, those who tended to pass in most life situations, and the non-passers. There again seemed to be several concomitants of this variable. In the first place, it seems that the longer the sex conversion had been, the greater the tendency to pass. Secondly, the better looking woman a transsexual became postoperatively, the more she would pass. Age was a third correlate of passing. The younger transsexuals tended to pass more frequently than the older transsexuals. Geographical mobility was also a concomitant. The passers had moved far away from their original home and also away from the area in which they had been operated on. In terms of a fifth variable, previous career, those transsexuals who had engaged in prostitution and stripping prior to the operation tended to continue to do so and did not try to pass as much as the others.

Finally, I examined a number of methods of tension and information management. When transsexuals interact with members of the dominant society, what are some of the methods they use to ease tension or to conceal information about themselves? One method, of course, was status passage. As was seen earlier, some attempted to pass as natural-born females. There were,

in addition, a number of more subtle methods. For example, transsexuals used social distance. They had only a few intimate friends; they judiciously lied; they used euphemisms, such as redefining the conversion operation as corrective surgery, something akin to the removal of a tumor. They substituted stigmas, for example, identifying themselves as strippers, or prostitutes, which seemed less deviant than being transsexual. There was, finally, a whole array of biographical reconstruction. Transsexuals seemed to redefine past biographical events so that the new configuration would make sense, so that their current identity—both normal and deviant—would logically derive from earlier events. These, then, are some of the things transsexuals were found to do in their ongoing coping with everyday living.

Five-Year Studies of Transsexuals: Psychiatric, Psychological and Surgical Aspects

Alex J. Arieff, M.D.

Our study was started in 1967 at Passavant Memorial Hospital of Northwestern University Medical School. Through August of 1971, 40 patients were analyzed; 18 were treated surgically, and 22 were rejected. (Dr. Stuteville, who started the project at Northwestern, has seen about 350 patients for possible surgery. He has operated on more than 34.)

The evaluation costs $250. This includes the psychiatric, psychological and social evaluation, as well as part of the preliminary legal fees. The surgical fee, which is flexible, is approximately $2500. This includes follow-up care, which consists of psychiatric care (if necessary) in the hospital, social service, and surgical follow-up. Hospital costs run around $100 per day; the patients usually are hospitalized for about seven days. Blue Shield covers most of this cost, and some of the private carriers have paid a significant portion. Some have requested a letter stating that this operation was surgically necessary for the medical welfare of the patient.

Of the few female-to-male patients we have seen, none has had a prosthesis made. Some have had mastectomies and hysterectomies. They have socially adapted and were rehabilitated except anatomically and sexually, as far as the prosthesis was concerned.

(Following the preparation of this report, another seven patients were evaluated and accepted. It is interesting to note that six were females. Previously, our patients were primarily males.)

Analysis of Transsexual—Accepted

Of those acceptable and/or operated upon, there were 14 males and four

females. Of these, 14 were white, three were black and one was Chinese. The median level of educational attainment was from the ninth to the 12th grade. The median age at examination was 28 years. One of the males was considered a borderline case in 1969, and was asked to get psychiatric care and live as a female before being reevaluated by us for surgery.

I. Early Interest in the Opposite Sex

a. Early childhood in 13 patients, one as early as four years; one patient was considered bisexual early.

b. Early interest as a teenager in four patients.

c. Early interest as exemplified by activities as of the opposite sex (i.e. male child interested in female roles such as housework, playing with dolls, dressing in female clothes, female sports for the male) occurred in a total of six patients; two were teenagers.

II. Anti-Social Behavior

a. Arrests occurred in three of the patients (one was minor, for transvestism). One was arrested for being with a homosexual.

III. Drugs Except for Hormones

a. One patient took LSD and marijuana more than one time.

b. One took LSD only one time.

c. One patient was recently involved in alcoholism, which was discontinued with psychiatric care. Subsequently, this patient was operated upon.

d. One patient had psychopathic tendencies, and had been taking other drugs.

e. Eleven patients were on hormones before being seen by our group.

IV. Sexual Experiences

a. Four said they had no experience whatsoever.

b. Four had mixed, that is, homosexual as well as heterosexual, relations.

c. Five had relations with the same sex.

d. Four had relations with the opposite sex.

e. In a few of the cases, the activity was rectal and oral.

f. Masturbation fantasies as being of the opposite sex occurred in five.

g. Dating assuming the other sex occurred in six individuals.

h. Three were engaged at the time of examination.

i. Bisexual dating occurred in only one patient with psychopathic tendencies.

j. Two of the patients were married. One of these patients married to save a girl from having an illegitimate child.

k. Two were legally married to two males and both were subsequently operated upon.

l. None of the patients had erotic feelings from cross-dressing as would occur in a transvestite.

V. Occupation Appropriate for the Other Sex

This occurred in 15, such as entertainers, impersonators, beauticians, a secretary, and a music teacher. One female operated an auto service station.

VI. Psychiatric Status

a. Absence of psychosis or psychopathy occurred in 14 individuals.

b. Four had psychiatric therapy for acute episodes because of conflict, mainly regarding their problem. One was a 15-year-old who subsequently was operated upon, and to date is doing well. One with psychosis and psychopathic tendencies had a lot of treatment on and off for years; retrospectively, this patient should not have been accepted. One male, married to a male, had depression with paranoia, had therapy followed by successful surgery and good adjustment.

VII. Family Acceptance

a. Family acceptance occurred in 12 cases.

b. Not acceptable in three cases.

c. Family encouraged the other sex in five cases. This is one of the theories; i.e., the mother starting and indulging the transsexual tendencies by cross-dressing the male child in female clothes and vice versa. This has not been borne out as a real etiologic factor by others.

VIII. Anatomical Characteristics of the Other Sex

Hermaphroditic traits, for example, hair distribution, infantile genitalia, enlarged breasts, decreased hair on the face and chest and mannerisms or athletic drives, were present in nine.

IX. Results Postoperative

a. Better social adjustment occurred in nine.

b. Better jobs occurred in two.

c. Five are married: four males and one female.

d. Occasionally, the masculine protest, that is, the male characteristic coming out in a converted female, occurred in two, one of whom is married.

e. Definite psychiatric improvement occurred in five.

f. Heterosexual relations were established in four, one of whom is married.

g. Dating has been assumed in two.

h. One is worse, with psychopathic trends, and we feel that this individual should not have been operated upon.

i. One is getting psychiatric support and therapy periodically.

Analysis of Patients Rejected

I. Sex

Nineteen males and three females: a total of 22 patients.

II. Age at Time of Examination

Median age was 31 to 35 years.

III. Educational Level Attained at Time of Examination

The median level was four years of high school.

IV. Sexual Status

a. Seven patients were married and able heterosexually.

b. Five had children.

c. One patient's wife was agreeable.

d. There were four transvestites.

e. Three patients were homosexual.

f. One patient was an acquired transsexual.

g. One patient had elected surgery as a convenience.

h. One was bisexual.

V. Reasons Rejected

a. Four patients were borderline; one had an incomplete test.

b. One patient was rejected for not having lived a minimum of six months as the opposite sex.

c. Three patients had poor social histories.

d. Three patients had poor future planning.

e. At least 15 of these patients were in need of psychiatric care.

VI. Psychiatric Reasons Rejected

Sixteen of the patients were diagnosed as psychotic. Of these, seven suffered mental depression; two were schizoaffective; and seven were paranoid.

VII. Other Diagnoses

Three patients were emotionally unstable; four were schizophrenic; one was prepsychotic; one was a sociopath; one was a chronic alcoholic; one had a low intellect; and two were immature.

IX Appendix

The Symposium

The Interdisciplinary Symposium on Gender Dysphoria Syndrome was held at the Stanford University School of Medicine, February 2-4, 1973.

The purpose of the meeting was to provide a forum for the exchange of scientific information about the patient who desires and is considered for gender re-identification.

The symposium was sponsored by the Divisions of Urology and Plastic and Reconstructive Surgery at the Stanford School of Medicine. Its principal architect and chairman was Donald R. Laub, M.D., Chief of the Division of Plastic and Reconstructive Surgery.

Participants and contributors included 105 representatives of the major teams and private practitioners concerned with the diagnosis, evaluation, and social adjustment of the gender dysphoric patient. The group included psychiatrists, surgeons, obstetricians and gynecologists, attorneys, psychologists, sociologists, and experts in epidemiologic and health services research.

In addition to the United States, numerous representatives from Canada, Mexico, England, Morocco and Australia were present.

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