

# **The Transgendered Patient: A Practitioner's Guide**

**By Melanie Spritz, D.O.**

**Associate Professor, Internal Medicine & Psychiatry  
Columbia University College of Physicians & Surgeons**

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To many physicians and health care workers, particularly during the training years, they encounter a rather unusual patient; "a man in a dress." This patient may be at first assumed to be a gay man in drag, but could also be assumed to be an MTF transsexual, a she-male, or a heterosexual crossdresser.

It is the aim of this paper to instruct the health care worker in proper care, and treatment of the transgendered. This includes some definitions of the transgendered and identification of the different subtypes within this sexual minority group, methods of doing a proper history and physical, proper laboratory tests to order and the reasons why they are necessary, psychosocial problems (inclusive of relevant psychiatric studies/problems/issues), STD problems (including HIV/AIDS), as well as knowledge of issues pertaining to the transgender (hereafter known as TG) community at large.

## **Definitions**

Many definitions exist of people who are involved in the TG world. However, it is first of all necessary to clarify when the term "transgendered." Transgendered as a term for a synonymous group of people first came into existence in the 1980's by those involved in the lesbian and gay communities to define, "those who straddled the borders between the two genders", as well as those who were, to use their terms, "gender transgressive". Initially the term referred to "drag queen," "she-males", "transsexuals", and "transvestites". That is those, by virtue of their gender identification, but not necessarily by their sexual orientation, differed from the lesbian and gay community.

However, as the gender community began to assert a separate identity from the lesbian and gay community, as well as with the advent of several non-surgical aspects of being transgendered as a means of gender expression manifesting themselves, the paradigm of being transgendered and of being a transgendered individual was altered.

The paradigm now includes the following, in addition to the above four categories. It now includes "butch dykes", "drag kings", the intersexed, "androgynes", "bigenderists", and "transgenderists". (1). I shall try to cover all of the various methods of gender identification that exist at the present time within these few paragraphs. However, I have devised a table (see Table 1) which covers the various gender transgressive identities, and differentiates them via predominate gender of origin, perception of the opposite gender (referring to gender of origin), sexual orientation (if it is said to exist within said designation, a source of controversy within the community itself as to how to designate sexual orientation of one's "new" gender, given the existence of a prior existence within another gender), as well as the basic definitions. Now, to give you some of the basic definitions.

Using Table 1 as the guide, We shall traverse it from the spectrum of a homosexual sexual orientation, to that of a heterosexual sexual orientation, to that of a more bisexual sexual orientation, but which those within the TG community call "ambisexual" and/or "pansexual," and finally to categories which encompass all. It should be noted that the term sexual orientation, applies to both the physical stimulation with said genitals that exist, as well as the desire for a sexual partner in an

intimate relationship. Both during and after the transition from one gender to another, the TG individual may experience a conflict, as well as a change in the physical object of desire, concomitantly with the alteration in sensation as one changes gender. Furthermore, it should be noted that many TG people feel that sexual orientation as a concept, is monogendered, or based on a fixed-gender social construct, instead of a more fluid-gender construct found in the TG world, which invalidates it when applied to TG people. Hence, many people in the present community, refer to themselves in their present gender role as pansexual, or ambisexual, to account for the change that took place with the alteration in gender. They might also use the suffix, -identified, to the sexual orientation as well to also take into account the alteration of their body from the previous gender.

The first types that we see are “drag queens,” “drag kings,” and “butch dykes”. These are people who are predominantly homosexual in their sexual orientation, but may act as an exaggeration of the opposite gender. This aspect of gender expression, may be used for performance, in the case of “ drag queens “ and/or “ drag kings “, but it may also form as a method of gender transgression within one's own identification of sexual orientation in the case of the resurgence of the “ butch/femme “ movement in lesbian subculture, as expressions and subversions of one's feminine identity, as well as the ideal of heterosexual women. Usually, if the person then lives full-time within the new gender role or idealized construction of it, as personified by the above space as given in the TG world, then the person progresses to a whole new category given below.

The next type of a gender transgressive individual is one who through the use of “street hormones”, and via “castration surgery”, “breast augmentation surgery”, the individual becomes a simulation of the desired gender, while as a result of educational/financial constraints is unable/unwilling to follow the medical standards of care (to be gone into at a later time) in order to obtain sexual reassignment surgery/ sexual confirmation surgery ( hereafter known as SRS/SCS ). This individual may also have a comorbidity with several types of chemical dependence, and could also be classified as MICA, or dual-diagnosis patient in psychiatric terms as well. It should also be noted that via class structure in American society today, that people of color also predominate in this group. Furthermore, the individuals are often preadolescent to young adult in age, because when the individual is younger, (s)he is apt to confuse issues of sexual orientation with those of gender identification, and look for one's self expression in the way described above. This person is also known in the TG community as a “street-transsexual”. It could be said that the only difference in the above two categories of gender expression lies in the ability to simulate via hormonal or surgical means, the desired gender and sexual role.

The next category called “club kid” somewhat straddles the previous two types, yet it goes beyond it in gender transgressiveness. This category, through elaborate costumes, and make-up, as well as through hormones, and/or congenital anomalies of birth, as well as through individual choice, tries to appear androgynous in many respects. That is, containing aspects of both/neither gender. This individual usually inhabits late nightclubs, and began to exist in the early 1980's. This individual is usually found in urban environments, predominantly major cities of the East, Midwest, and West, especially in New York, and San Francisco, because of their large lesbian and gay populations, and as a secondary consequence of their influence on the majority culture. It is often said that the birth of this movement began in the early 1970's, with the advent of the “ glamour rock “ movement, and with the rise of the androgynous rock performer David Bowie, and the character he created- “ Ziggy Stardust “. This individual, like the previous one, is primarily preadolescent to young adult in age, and can also said to be chemically dependent. Ethnicity doesn't seem to matter, since there is a wide range of ethnicity in the nightclub crowd on any given night. However, the individuals seem to come from predominantly middle-class and/or stable homes. This person might also be better educated than the previous classification, having attained a college education, or of having it as a goal. In terms of sexual orientation, these individuals are a mix of both heterosexual and homosexual youngsters, although it could be said that the majority identify themselves as bisexual, or do not consider sexual orientation to be an issue at all.

Crossdressers, otherwise known as transvestites, is both the next and the largest of all of the categories. This category is estimated to make up approximately 5% of the total population, as well as much as 75-80% of the TG population. These people are also classified as transvestic fetishism in the DSM-IV, of which many people within the crossdressing ( hereafter known as either CD or TV ) community differ in its' inclusion ( more about this in the issues section). These people are primarily heterosexual in sexual orientation, although they are found to be erotically stimulated via the placement of female undergarments on the body, and said to desire so- called “ lesbian “ relationships with their female sexual partners. These individuals are predominantly male in terms of gender of origin. They may also be middle class, both in terms of upbringing, as well as via responsibility in the social structure as well. This classification however crosses all boundaries, in terms of class and social structure. It is further ironic in the predominance of these individuals in both the armed services, as well as in police/fire departments. Furthermore, these individuals may continue to practice in various masculine blue collar occupations as well, in contrast to their feminine gender identity. These individuals are often “in the closet” in contrast to many of the other types, and/or classifications. They do so to protect their livelihood, but appear to be, in psychiatric terms, ego-dystonic, and may illustrate their dystonism via a “homophobic” stance.

The next transgendered type or category is that of the androgyne. The androgyne can originate from either gender, and is considered to be ambisexual/pansexual in terms of sexual orientation, especially because of the ambiguous nature of their primary and secondary sexual characteristics. These individuals may also be intersexual in nature, having gone back to gender ambiguity, as a means of finding oneself, after childhood SRS, or as a means of social construction. These people may also be part of the developmental process of being a transsexual, or a transgenderist, during the transition from male to female, or from female to male. It is during this time that the TG individual is often questioned by others, “ Are you a boy or a girl? “, and experiences overt and covert forms of discrimination, in the forms of homophobia, and transphobia . However, in the interests of brevity, this subject will be covered more in the psychiatric, and the psychosocial aspects of care. This individual can come from any class and/or racial strata, but is usually older, being in the twenties, although some have also been in their early thirties. This individual usually is at least middle class, in terms of class structure, as well as predominately white, although there is much use for variation, since as part of the process of “ becoming “, also subverts racial, and class structures, along with the polarity of gender identity.

A person called a bigenderist is the next category. A bigenderist has two definitions at the present time. The first definition is that of an individual who lives dual identities in both genders. This individual may or may not be in the process of cross gender hormonal treatment (hereafter known as CGHT), as well in the process or the identity of a transsexual, or a transgenderist in transition from one gender to another. However, this individual could also view life from a CD/TV aspect as well. This individual may maintain legal identity cards, in both the male and female forms, as well as credit cards etc. However, this person could also outwardly appear as the member of one gender, and be in a sexual relationship regardless of sexual orientation, using the gender of origin. Thus, an outwardly appearing “heterosexual” relationship, could be by both participants taken as “ homosexual “ in content. The same relationship could also be apparently “homosexual,” while be in actuality via both participants “heterosexual”. Thus, one sees the subversion of gender identity and both sexual expression illustrated in both the bigenderist, and the androgyne forms of TG expression. Both of these forms have often existed in both literary forms, as well as well known persons in literature. However, both did not begin to appear in greater numbers until the mid to late 1980's, when the gender community began active formation in reconstructing its' paradigm, and dissolving some of its ' relationship to the lesbian and gay community.

The next category is one thought to be the most common by the layperson via tabloid television, and television talk shows, but is actually one of the least common of all the above categories. The individual, and/or category that is being described is transsexual (hereafter known as

TS). This individual, through both CGHT and SRS, undergoes transformation from one gender to the other. Statistically speaking, this individual represents 1/38,000 to 1/58,000 of the total population, as well as 1% of the gay male population. The best incidence of this individual in the general population is said to be 1/10,000. It is also said that approximately 1% of those applying for, and obtaining CGHT and SRS, go through towards completion of the process, in standard gender identity clinic structures, and by following the standards of care. This person is also usually white, and from a middle class background, although a majority in the seventies were both people of color, and sex workers. This individual may also have had issues of chemical dependency, sexual abuse, and incidence. This person is also to have a comorbidity with dissociative disorders, as well as personality disorders, with a predominance of histrionic, borderline, and narcissistic personality disorders. It has been thought by many psychiatrists that the chemical dependencies may relate to both internal and external forms of homophobia and transphobia, and is therefore a form of ego-dystonia. Furthermore, a correlation has also been found between the incidence of sexual abuse and/or incest and the incidence of dissociative disorders within this group. However, this will be discussed further in the psychiatric section of this paper.

Transgenderist is a category that lies somewhere in between TS and CD individuals in the TG community. Essentially, these are individuals who through CGHT, either from a CD or a TS perspective, have chosen to live in the gender opposite the gender of birth or origin. These people have decided to opt out of surgical means to fulfill their goal, and thus forgo SRS/SCS. These people tend to follow the HBIQDA standards of care, and to be similar to both TS, and CD's both in origin, as well as initial presentation. They are often called within the TG community "NonOps", using the old terminology, as well as adopting the medical terminology to signify surgical status, via "PreOp" for a preoperative/presurgical candidate, as well as "Postop" to denote one who has undergone SRS. These individuals are quite comfortable with their gender status. It could also be said that this group of individuals is usually in the age range from the late thirties to early forties, up to the eighties. These individuals are also part of the developmental cycle of the TS, in that they are often individuals who had began, in TS/TG vernacular, "the Real Life Test", which is the period, when according to HBIQDA standards of care, that the individual lives a 1-2 year span in the gender of identity, rather than that of birth. This is placed so that the person can have a realistic life assessment of the new gender, than an ideal of such, prior to SRS/SCS, which is considered to be a permanent alteration of gender status, and is considered to be irreversible. Although there is one instance in the literature where such a reversal took place. These individuals choose to live in an opposite gender space, despite of, and because of the HBIQDA standards of care.

The final category, type or classification is the intersexual. The intersexed, are in medical terms, hermaphrodites and pseudohermaphrodites. However, in terms of both the TG and the intersexed (hereafter known as IS) communities as gender transgressive by means of birth. This includes not only Klinefelter's and Turner's type individuals, or which there is predominance in the TS population, and of the TG population as a whole, but also contains individuals who have congenital anomalies such as Androgen Insensitivity Syndrome (hereafter known as AIS). This group of individuals, contains people with adrenocortical insufficiencies of all types, as well as individuals born with many varieties of ovitestes, In essence, these people are usually seen by pediatric endocrinologists, as they develop, and often undergo SRS when they are toddlers, often at there parents' behest. It is often necessary to perform numerous laboratory tests to confirm their status, because many TG/TS individuals use it as a justification for their status, in the face of enormous external and internal transphobia

It must be noted that those who cross the gender divide may be very confusing to the practitioner initially, as it is to one who has experienced those feelings directly. However, it must be pointed out that these categories are not rigid constructions, both within the gender community, as well as with the TG individual. That is the individual may begin with one identity, and then find out via self-exploration, as well as CGHT, that one belongs to another.

For example, an individual may go from a gay man in drag to she-male, to TS, and finally obtain SRS, and be considered female, who has an attraction to other females, and is thus lesbian in sexual orientation. Another example is of an individual who intersexed, has undergone SRS as a toddler, and is raised, and is legally considered to be female. Through self-exploration, this individual explores the lesbian world, and often acts out the role of “butch dyke”. This individual, who also having grown up with a severe shame of her genitalia, because they looked so “different” than other girls, then explores the IS world, and its' possibilities. This individual then considers that she is indeed an androgyne, and instead remains content to this day as both/neither gender.

As one can easily see, the journey of a TG person is fraught with possibilities that exist for self-expression. It is thought that as one explores constructions of gender identity and sexual orientation, with a TG patient, that it can be rewarding as well. One must try one's best not to hinder this process by imposing one's own opinions of gender, gender roles, and sexual orientation on one's patient, lest one lose their trust, and sever the all to important physician-patient bond.

### **The Standards of Care Issue**

Standards of Care are an issue in the TS/TG community that has engaged a great deal of controversy. As a result of the very existence of a standard of care for TS/TG persons being present, as well as a result of changes within the community, as definitions of gender were stretched, and eliminated, there are now at the present time three standards of care that exist for this group of individuals. These standards reflect the constituency of each group, as well as reflecting the problems that each group has encountered.

The first standards that were formed were the basis of the two others that followed, that is that they were written in response to this coda. These standards were written by the Harry Benjamin International Gender Dysphoria Association( otherwise known as HBGDA ). The first set were written in 1979, as a result of the need by the various medical professionals, and mental health professionals involved in the group to fit a standard of care that met this group of individuals. The group is named after Harry Benjamin, a prominent Park Avenue endocrinologist who was one of the first to systematize treatment for this subset of individuals. He also had a wide variety of patients, and in his own way formed the protocols for medical treatment of these individuals. He was also the author of one of the classic books on transgendered experience, “The Transsexual Phenomenon”, which was published in the 1960's, and served as the original paradigm for transgendered treatment, HBGDA as a group is composed of physicians (including psychiatrists, surgeons, endocrinologists, researchers, internists, and family practitioners), mental health professionals (psychologists, and social workers), as well as many other health care workers who work in treating the gender community. Coming from such a relatively conservative group, it is no surprise that the standards that they first articulated in 1979, have undergone little change or revision since that time.

To summarize HBGDA standards, they include the following principles. First of all, they are based on the DSM-III-R standards for transsexualism, and are currently being revised to reflect DSM-IV standards for gender identity disorder, and transvestic fetishism. Second, they state that for a minimum 3-6 month period that a person has to undergo therapy, with someone trained in gender issues. It does specify that that individual does not have to have a doctorate, nor a medical degree, but that at one time during the process, the patient has to encounter at least one person with that level of training in a psychotherapeutic encounter. After the initial 3-6 month period has ended, the individual may be given permission by the therapist to obtain CGHT, That person is then referred to an appropriate physician, if one is present in that area to administer CGHT, After a certain amount of time has elapsed, and the individual has began the transition from gender of birth to gender of choice, then that person can begin to live as a member of that gender. This is called the “Real Life Test” by those in the gender community, and involves a 1-2 year period where the person actually

lives in the new gender, obtaining employment, credit history etc., and deals with the reality of living in a new gender. During this period, psychotherapy is often encouraged to continue. After the person has been examined by another psychotherapist, after this minimum period of time has elapsed, then a recommendation for SRS is then elicited. At this point a surgeon is recommended, however the surgeon can also refuse to give surgery to this individual as well. Once SRS is completed then it is felt that the person is able to adapt to their new gender role, and only occasional follow-up is at this point recommended.

As one can easily see, HBIGDA standards of care have many problems. They do not account for the diversity of TG experience, making SRS the one and only goal, and not taking into account any of the other varieties of TG experience. Furthermore, while they have peer review for the mental health professionals, it also fails to give the same peer review to other physicians. It fails to recommend publication of surgical results, and/or complications, nor does it do the same in terms of CGHT. It does not mediate the training of those who administer CGHT or of SRS, nor does it serve as a basis of recommending optimum treatment and/or treatment protocols for those providing CGHT. It also does not allow for the publication of any adverse events by the physicians involved. HBIGDA also stands as the standards of care for those people who are pre-surgical, but what about those TG individuals who have already had surgery? It fails to account for postoperative treatment and follow-up for such patients. It also fails to account for those who might want to provide solutions or options within the transgendered sphere who do not want or desire surgery of any sort, or if it is done, is done of a limited variety.

HBIGDA standards, while they do have their limitations, are not totally with fault. In an effort to go more towards the side of the patient in these cases, the International Congress on Transgender Law, and Employment (hereafter known as ICTLEP), a legal association consisting of transgendered legal professionals, as well as transgendered laypersons, and their supporters formulated their own standards of care in 1990. This document is based on the “right to privacy” issue that is documented as the basis for pro-choice actions, and it reflects the philosophy of the organization, in that the individual has a right to choose any course of action in the pursuit of happiness. It was formed with not only the input of TG lawyers and TG patients, but also with several physicians who were active in the gender community., although ICTLEP refuses to name the physicians, and/or mental health care workers evolved in the formation of this document. Also as a preamble, for years the TS/TG community has debated “ surgery on demand “ versus one, as is used in the present light, where distribution of surgery and/or CGHT is tightly restricted by various rules. However, ICTLEP standards went directly in opposition to the HBIGDA standards by asserting that the individual had the right to be given CGHT, simply by expressing the need for it, and that the individual also had a right to SRS in the same manner. This violated any sense of medical ethics, leading many individuals in the gender community to go against this manifesto, because it was against current medical ethos regarding treatment of any sort. This document fails to take into account any contraindications to any such treatment, which the HBIGDA document does in denying treatment to any individual with an active psychosis, or evidence of previous psychotic behavior, as well as distinguishing between the SRS done to the IS early in life, and thus actively excluding them from the definition of TS. This document, also fails to take into account the need for peer review of both medical and mental health professionals, essentially eliminating them from the equation as gatekeepers, but still maintaining some legal autonomy as providers. It solves the above difficulty by eliminating the need for anyone to give a prescription, and enables the person who wants CGHT, and SRS in any way the ability to obtain it, simply by having the desire. The only good thing in this standard is its' ability to depathologize the transgendered, and transsexual individual. It also takes into account the diversity of the community as well. However, it failed to provide for either adequate medical /surgical supervision and peer review, as well as the same for psychotherapy, which might be viewed as mandatory for any individual undergoing such profound reconstructive surgery, no matter how well adjusted the individual.

In summary, we have gone over the two sets of standards of care, and hopefully elucidated any assets and liabilities with each document. We have also gone in to some of the details surrounding each document, and have hopefully informed the reader on what is medically valid at this time, as well as what is currently under debate. While we do not recommend any one at the given time, it is thought that in the interests of medical jurisprudence, that we favor the HBGDA, standards in treating this group of people.

## **History and Physical**

We have gone through the subtypes of individuals, and we have related problems in the current standards of care for treatment of individuals, we shall now document the mechanisms by which a health care worker can do an adequate history, and physical of this individual. We shall do this by first illustrating our intake form, and then by telling the reasons why certain questions are asked. After that is completed, we shall then go into the nuts and bolts that comprise the complete physical examination, stating why certain procedures are necessary, and how a more complete examination can be done on these individuals.

The history intake form is as illustrated for our clinic (see Figure 2) . As one can see it goes over many of the standard questions in a standard form. However, it also asks questions relating to prior use of hormones, how one identifies in term of gender, its' origins, etc. It also goes into questions involving rape and/or sexual assault, or sexual abuse of any kind. It goes into partnership affiliations, but does not label as gay, or lesbian, and it goes into safe sex issues. In many of the other cases, it is much like the standard format, however the expected answers often differ from that which is considered within the normal range.

The first part of our intake involves the name of the individual, this can pose some difficulty to the practitioner, because the patient may desire to be called a name other than shows up on legal forms of identification. We however, choose to address the person in a manner congruent with their own self-image, and then to process any forms with the legal identification, until they have been altered as well. This part of the history explains how the patient perceives themselves, when they first arrived at their conclusions, as well as what their goals may be regarding treatment, Thus, the primary health care provider has a tool, in gauging both patient response, as well as via classification of types of TG person that this individual may be, and over time how that image will change. At this point of time, one should also ask about the marital status of the individual, so that one can place and discuss the intimate relationships that the individual has, and to relay the possibility of partnership counseling as well, as the person undergoes the transition from one gender to the other. One should also ask about the religion of the individual, and if one is active with it. This question can also lead to the individual relaying facts of a spiritual nature, which are quite common in the TS subgroup of individuals.

The next part of the history deals with the past ways in which the patient has attempted to be transgendered. It goes into when, if ever the patient ever took hormones, how they were used by what dosage strength, an/or brand name, and by which physician, if there ever was a physician involved in the patient's CGHT. This is the usual chief complaint form of the history, and uses the patients' own words in defining themselves, as well as their problems of living in this world. One should also use this portion of the history to get to know the patient better. One should think of it as the “ history of present illness “ section, whereby one usually characterizes the symptoms, nature and course of present state, as well as any precipitating events, frequency and severity. This part plays a great role with crossdressers, and TS/TG individuals who often go through several purges of clothing etc., before they come to terms with their identity, also known as “coming out”. During this time, one can also look for current manifestations in the individual, as well as quality, and going into

the last time the individual was treated for gender discordant behavior, and by whom that patient was treated, as well as the means, and methods of the previous health care practitioner.

Following this, we now go into the patient's medical history. Like most conventional histories, we go into life threatening illnesses, but particular attention is given to cardiovascular disorders, as well as the hyperlipidemias, since they can be altered with CGHT. We also look for signs of metabolic, and or endocrinologic disease, like hypothyroidism, diabetes mellitus, since CGHT has also been found to alter these disease patterns as well. In essence, we look upon anything that will normally be altered by the sexual steroids, much like in post menopausal hormonal replacement therapy, or when dispensing oral contraceptives. We also look into prior hospitalizations, with particular emphasis placed on psychiatric hospitalizations, for depression and/or suicide attempts, which are quite high in the transgendered world, much like in the gay or lesbian world. At this time, one can also go into prior surgery, which may be useful to the TS, who has already undergone SRS, as it can locate the surgeon, and or year that surgery took place, thus laying the foundation for learning both those surgeons who perform SRS, as well as an awareness of their techniques, and any problems with those techniques on the affected group of individuals. One can use this knowledge to be aware of, as well as to document many postoperative complications such as hemorrhage, fistula formation, and wound infection. One can also use this time to document any trauma and/or injury, especially those that may be self-inflicted, or as a consequence of a prior abusive relationship. At his point, one can further the PMH by asking the usual questions about allergies. Anecdotal evidence at this time suggest that this subgroup of individuals may have a higher than average rate of allergies than the average population. One should never neglect the usual questions about blood transfusions, poisoning, and childhood immunizations during taking the medical history of the affected individual. However, noting any travel may be significant, since it may play a role in the surgical history of the patient. Further specific details about the history taking of these individuals follows in the next paragraphs

We investigate in terms of past surgeries with particular emphasis placed on any plastic/reconstructive procedures looking for SRS/SCS, rhinoplasties, chondrolaryngoplasties etc. At this point of time, it might also be useful to ask the patient, if she is a TG woman, whether she has had breast augmentation surgery, and if not , whether she desires it , At this point, one can also educate the patient about breast augmentation, and give dissenting views if needed. We also use this time to ask the patients about any procedures that may have been performed like orchiotomy, vasectomy etc. This is important, as the person may have undergone voluntary sterilization procedures, with the self-knowledge that in undergoing SRS/SCS, and CGHT that they may sterilize themselves. It is also useful in that the practitioner can then assess what has been done in terms of surgery via “ the street “, as well as through the techniques of the various surgeons.

Next, we investigate the family history of the individual. It is important to ask a TG woman, about the incidence of breast cancer, cervical cancer, and testicular/prostate cancer in her family, since with the advent of CGHT, she may be at risk for them as well. For the TG man, it is also important to ask the same questions, as her risk may increase significantly as well. It is important also to ask questions regarding the metabolism, because hyper or -hypothyroidism, can be activated via CGHT, as can diabetes. One should also watch out for psychiatric problems as well. This should be asked in the patient's own medical history, as well as the family history. One should look for unipolar depression, bipolar states, personality disorders, and anxiety related states like panic disorder as well. One should also note if the patient is being treated, or has been treated in the past, for any psychiatric disorder. One should also place emphasis on any bleeding/thromboembolic history within the family, since CGHT may alter the coagulation cascade of the affected patient. At this time, one may ask whether there were any other individuals within the family tree that are gay/lesbian/bisexual, or if there were any other family members that were transgendered. Particular emphasis in this portion of the history should be places on endocrine, liver, kidney, and heart diseases, as these are primarily affected by CGHT.

In terms of social history, it is important to see if the patient smokes, due to increased risk of thrombophlebitis, much like HRT, and OC's. It is also important to know the alcohol / drug related history, as they may alter concomitant liver function, as well as play a role in activating microsomal enzyme systems. These are also important to note as well for the purpose of seeing various coping mechanisms etc. It is also important to ask questions about caffeine intake, as they can tip off the knowledgeable practitioner about various anxiety related states. At this time, one can also ask about the ability to obtain hormones on the street as well. One should also note at this time if the person has ever gone for treatment of alcohol, or chemical dependency; its location and/or length of time, and whether the patient feel that they have been successful or not. It is sometimes best to combine both the psychiatric history within the social history. However, if questions on identity yield answers in any of the same categories, then one will follow the patient's own flow, and obtain or repeat the same answers during the course of the history anyway. During this time, one can ask the education, and occupation of the individual, because both may play a role in the gender identity formation of the patient, as well as for stratification by type for the health care practitioner. Furthermore, question involving military service are of particular significance for TS/TG individuals, as has been documented as a "flight into hypermasculinity" that is well documented for these subtypes of individuals. Military service is quite significant also for TS/TG men, as they may find military service as way of escape from their previously assigned female gender role. Military service may also be a marker for CD/TV males, as they seem to gravitate to many of the "more masculine" of occupations in a cognitive dissonance with their feminine identity that coexists with the male identity. As in any other social history, one should also not neglect to note what a typical day for the patient is like, their overall satisfaction or frustration, as well as hygienic habits, lifestyle, dietary habits, and extent of sports and exercise. The social history of the patient will often provide the practitioner with most of the context and the texture of the patients' life

In TS/TG men and women, one should never forget the most important part of the history taking prior to the physical examination. This part is usually the OB/GYN section of the history, however this section given the diversity of the transgendered population should be applied to all individuals, and should be more properly labeled as genital history. In this history, in those individuals born female, one must ask questions relating to last menstrual period, age of menarche, and menstrual character such as frequency, duration, regularity and flow. The TS/TG man may be angered by such questions, as they are about their reproductive status as women, which they both hate, and despise, and therefore are not in need of talking about especially in the course of a medical examination. However, this portion is important, in that one can ask questions about sexual life/history to affected individuals. During this time, one can ask postoperative TS women about vaginal infections, whether they are dilating their neovagina (especially significant in all types of SRS surgery). One can also ask about whether this individual has ever had a Papanicolaou smear done, because these women could be in a pre cancerous state just like any other woman, since homologous tissues are used in SRS. One can also ask about lactation involving both sets of individuals, as well as prior use of contraceptives for transgendered men, and the onset of perimenopausal symptoms in transgendered women. Furthermore, as one asks for the sexual history of the individual, one must emphasize that many interpretations can exist for gay, lesbian, and heterosexual relationships, and that the organs of the individual play no role in how a relationship is labeled. As a result, the practitioner must be aware of safe sexual techniques, not only for heterosexual partners, but those that apply to gay, and lesbian relationships as well. Furthermore, one can use this part of history taking to bring up to the patient, dependent upon where in the typology the individual fits, the basics of doing both breast, and testicular self examination, both before and after surgery. Furthermore, at this point the practitioner may be asked to explain many methods of self-stimulation to provide sexual satisfaction to the patient population. This is also an opportunity to make the individual aware of various rewards, and/or limitations of their new anatomy. At this point, one should never ask the patient whether contraception is involved, or

whether the patient had any type of births involved, as they may offend the individual, unless they were discovered in the HPI section of the history. One should be very careful in this portion of this history, and should not take unless, one uses the utmost tact, and sensitivity to the individuals used, Further information is found in the preceding two tables (see figures 3 and 4 )

Like any other history, one should do a review of symptoms section (hereafter known as ROS). At this point one should note all of the other conventional portions of the history, but one should also look for any detail involving GI symptomology, commonly found in high dose CGHT prior to the surgery, cardiopulmonary symptomology significant for PE, or CAD/CHF/MI, urinary for opportunistic infections. One should also not neglect the endocrine, because it may show the signs and symptoms of Cushing's Syndrome, predominant in MTF TS individuals who take high doses of sexual steroids, as well as urinary history for UTI's in the newly postoperative TS woman, as she may be ignorant of her new anatomy, and of the increasing frequency of UTI's in the female population, and how to treat them. One should also not neglect the rheumatologic portion, since connective tissue disorders may predominate in the “ she-male “ group of individuals who often inject industrial strength silicon in order to further their feminine appearance, and are thus apt to suffer many illnesses that affect connective tissues as a consequence. One should also look into the neurologic, as the incidence of strokes in these individuals is 35-45% higher than the given population. One should never neglect the genital, as at this portion of the history taking, it will serve as a guide to the individual's mechanisms of sexual satisfaction, as a measure of the progress of CGHT over time, the effects of SRS surgery. Naturally, psychiatric portions of the ROS should be emphasized for both Axis one and Axis two disorders, and should use this portion to look for any other psychiatric problems that the patient has, or has a tendency to have now or in the future.

The physical examination of transgendered individuals should be structured like any other physical examination. Particular attention should be paid to the facies, and voice, body build, and to the general appearance of the individual. Appearances can both fortify as well as distract the practitioner. They can “fool” even the most aware medical practitioner, and they are no indication of sexual orientation, nor of intersexual status. Facies are considered to be important because it may show early signs of Cushing's Syndrome associated with sexual steroid usage and/or overdose. The voice may or may not give away the gender of birth of the patient. Body build and /or habitus may also show effects of sexual steroid usage, or of how much work may be necessary for a patient to “pass” as a member of their new gender. One should also use posture, and gait for clues for “passability” in the new gender as well.

Naturally, vital signs are important as in all patients. However, different fever patterns may play a role in the treatment of the immunocompromised patient, and hyperthermia may be one of the first symptoms of an adrenal crisis, along with tachycardia. Adrenal crisis is significant for those patients who had previously obtained their “hormones off the street,” as well as for those patients who are intersexed, and have several salt-wasting syndromes.

Beginning the examination, we shall start at the head. Significant signs to look for facial edema, a sign of Cushing's syndrome, as well as seen in several adrenocortical insufficiencies. One should also do auscultation to look for bruits indicative of arteriovenous fistulas, or aneurysms. One should also look for the cushingoid “moon face,” as previously indicated, as well for signs of myxedema seen in hyperthyroid conditions. One should also look for signs of hirsutism, as polycystic ovarian disease incidence is found to be high in intersexed individuals, as well as within this general population. One should also do Chovstek's sign to look for signs of hypocalcemia, and palpate the sinuses for any person predisposed to any allergic condition. In looking at the eyes, one should look for alopecia in the eyebrows commonly found in hypothyroid states. One should also check for signs of icteric sclerae common in hepatitis .One should also check for injected conjunctivae, commonly found in those people who use both recreational drugs and alcohol. When one looks at the ears of the patient, one should look for at the pinna for gouty tophi, or for some of the first signs of Marfan's syndrome, common in homocystinuria, that has been found in TS

individuals. When looking at the mouth, one should be aware white areas in the mucosa indicative of candida and leucoplakia , as well as for brownish pigmentation indicative of Addison's disease. One should naturally look at the teeth for signs of caries and abrasion, which may show some of the early signs of wasting in immunocompromised patients. One should examine the tongue for any abnormal papillae, as well as check for the macroglossia present in hypothyroidism. One should also routinely test the gag reflex, and look for tongue and/or uvula deviation as part of one's neurological examination.

At the neck, one looks for the webbing indicative of Turner's syndrome, as well as for any signs of edema, for adrenal syndromes , and for goiter indicative of various thyroid states. One also looks for tracheal deviation of any sort, either as a consequence of the previously mentioned syndromes, or as an indication of any pulmonary problems. In evaluating for goiter, one should palpate for multinodular, diffuse or single nodules, and should also do Pemberton's sign if a goiter is noticed, for signs of compression. Naturally, one should check for lymph nodes of any sort, since they can be signs of an upper respiratory infection or signs of immunocompromised hosts. One should also be aware of the cricoid cartilage of the TG woman, as if it is enlarged, she may desire a chondrolaryngoplasty to remove her "large Adam's Apple."

When checking the thorax of the transgendered patient, one should naturally look for any signs of asymmetry, as well as pectus excavatum, pectus carinitum , as well as for those patients who have barrel chests. One should also look for any lymph nodes, as they may be indicative of breast cancer in its' early stages for any TG individual. One should naturally check for chest wall expansion and fremitus much like any other patient. However, one should palpate the chest of those individuals who had previously used any form of silicon for crepitation, seen in subcutaneous emphysema common in these patients, otherwise one should also use the scratch sign, looking for any signs of pneumothorax common in those patients' affected with autoimmune diseases associated with the use of silicon.

In doing the examination of the heart, one should look for heart sound indicative of mitral stenosis and/or regurgitation associated with endocarditis, and with intravenous drug usage, which might be common in certain segments of the transgendered population, as well as for any of the congenital abnormalities associated with either Turner's or Marfan's syndrome.

When beginning the examination, one should instruct both those individuals born female, and those born male, in the art of breast self examination. One should look for signs of edema, dimpling, pigmentation changes indicative of a cancerous process, as well as check for any signs of discharge, which could be signs of excessive hormonal usage. One should also look for any masses, particular in those individuals, by virtue of their history prone to fibrocystic disease, and breast cancer.

Examination of the abdomen begins with inspection looking for scars indicative of surgeries, particularly since SRS often leaves many abdominal scars. One also checks for masses, and hernias, as they may play a role in the eventual surgery of the patient. One also looks for striae, spider nevi, and changes in hair and pigmentation, which coexist with many endocrine abnormalities. One also looks for caput medusae prevalent in hepatic pathology as a result of IVDA of hormones "on the street." On auscultation of the abdomen, one checks for bowel sounds associated with peptic and abdominal ulcer and gastric reflux as a result of the hyperistalsis of the sexual steroids. One also checks for hepatic abscess, as a consequence of street drugs. The medical practitioner should also try to elicit tenderness when palpating the abdomen for signs of GERD, and PUD. One should look for any hernias or periumbilical lymph nodes, which may be indicative of STD's.

In examining the abdomen there are several organ systems that merit particular attention. These include the liver, gallbladder, spleen, and urinary bladder. So, we shall go into more detail with these organs.

When examining the liver, palpate for size, surface and edge, and try to estimate the size and character of the organ, because it may be affected as a consequence of CGHT, as well as any other drug usage the patient had prior to the PE. One should always use Iceberg's sign if there are any

signs of ascites and /or hepatomegaly in the patient. When examining the gallbladder, particular attention must be paid to Murphy's sign, and Courvoisier's sign, as they may aid the practitioner in finding cholestasis, cholecystitis, and choledocholithiasis. When checking the urinary bladder, one looks for any abnormal signs of distension, which may be found in overusage of some anti-androgens found "on the street."

The examination of the genitalia of the transgendered patient must be performed with utmost tact, and professionalism on the part of the health care practitioner. These patients must be approached as if they have undergone some sort of "rape trauma," since the examination of a part of the body that the individual feels distaste/revulsion for, must respect the patient's mindset, and emotions. This may be the longest portion of the physical examination to take place as a consequence, so the practitioner must be aware of any time constraints as well. These examinations must be performed on every patient initially, then at 3-6 month intervals thereafter, to note the effects of CGHT, as well as any subsequent SRS. In this portion of the examination, the examiner notes changes in the escutcheon of the individual by using the Tanner stages of the gender of choice. One should also look for any signs of hypertrophy or atrophy of the affected organs as a consequence of CGHT. At this point of the examination, one can also probe further with the sexual history, as well as teach the individual ways of self-stimulation if one is postsurgical. It should also be noted in the postsurgical patient, that there might be some loss of sensation in the perianal area as a consequence of SRS, so the practitioner at the patient's request may also do a sensory examination of that area. One should also show the TS female who is newly operated on the correct usage for vaginal dilatation, and or stent usage.

At this point of the examination it would be helpful to detail salient points in examining the neovagina and the neophallus. First, we should examine the neophallus. Unlike the regular phallus, neophallus can be of one of two types based on the type of surgery the patient has undergone. If it is a phalloplasty, then one must approach the examination by looking at superficial tissues for signs of STD's. One examines the neoscrotum, to see if the testes are in place, and there are no masses just like in the ordinary testicular examination. One also examines the patient for signs of herniation, as one would examine any other male patient. One transilluminates the testes as well. One examines the glans penis, scrotum etc. for signs of sexually transmitted diseases. If one has had a phalloplasty, then the viability of the pump (like one after TURP surgery) One examines the pump in much the same way as one who has had prostate surgery is examined. Furthermore, since superficial perineal nerve fibers are often excised in the course of SRS, or placed into a new position, then a superficial sensory examination must be performed to determine to both the patient and to the practitioner the extent of viability of orgasm in the new gender. At this point, one can also discuss methods of self-stimulation, as well as sexual arousal to the patient. One should also examine the bladder and urethra, as they are stretched during surgery, and may result in hematuria, asymptomatic bacteruria, and urinary tract infections. One should still look for fungal infections, since the anatomy, although homologous originates from the same area as a woman, and thus may harbor some fungi, in the course of their normal flora.

Like the phalloplasty, the patient who has undergone metoidioplasty, requires the same sort of examination on the neoscrotum, as well as the bladder/urethra as above. However, they differ in the fact that in the metoidioplasty, the clitoris has hypertrophied, and is used as the primary organ for sexual stimulation. Naturally, a sensory examination has to be performed postsurgically, and periodically afterwards as above. However, since the clitoris, now acts as a micropenis, the hood, now acting as a glans penis, and the secretions becoming similar to fluid from the seminal vesicles. However, unlike the phalloplasty, skin is not grafted, and the labia majora and minora form the basis of the neoscrotum as above. However, there is no pump that has to be checked. In all other respects, the examination differs little from the previous genital exam.

When examining the neovagina, one should first determine whether a neoclitoris was formed as a consequence of surgery. If it has, then one should do the conventional pap smear on the

individual patient in addition to the pap smear detailed in the succeeding paragraph. One should also examine whether penile inversion surgery has taken place, or whether the small intestine is attached to the neovaginal wall. If the penile inversion surgery has been performed, and a neoclitoris created, one should like any other genital exam, look at the external structures and examine them for any signs of disease, just as in the two previous examinations. One should then examine the patient in the following manner. (see Figure Three for more details)

- 1.) Wipe away excess mucus, or leukorrhea with a cotton pledgette This is especially important in those people who have had the surgery with the small intestine, as it may cause excess mucus, in contrast to the penile inversion surgery, where participants have to lubricate themselves.
- 2.) Obtain a thorough endocervical smear with a brush, cotton swabbed applicator or an aspirator.
- 3.) Repeat the same steps above with the sides of the neovagina wall, use on another slide for Pap smear.
- 4.) Immediately fix both specimens with fresh fixative.
- 5.) Use the wooden Ayre spatula to collect a thorough endocervical, and neovaginal wall specimen, and be certain that the cells are obtained from beyond the borders of globular ectopy.

Once the following examination is performed, it is still essential to perform a bimanual examination, despite the fact that the woman involved is essentially a postmenopausal female who has had a total abdominal hysterectomy, and bilateral salpingoophorectomy. It is performed to locate any masses formed as a consequence of surgery. This is not an entirely uncommon problem, but it is often unrecognized by all but the surgeons who perform SRS/SCS. So the practitioner is asked to examine the vaginal walls for cystoceles, urethroceles, rectoceles, and enteroceles. Furthermore, one also examines the genitalia for varicosities, and fistula formation. Prior to this examination, the exterior of the neovagina, is examined for edema and Bartholin's cyst formation in the labia majora. One should also not forget to look for secretions in the urethral meatus. One should, if the TS woman has a neoclitoris, examine the corpus cavernosa, and the glans, as they shall still be present, albeit in different places. One should also examine the introitus for any signs of prolapse. This is especially important in the newly operated TS woman, as the neovagina is prone to collapse in these areas, as well as fistula formation. One should also examine the perineum for any signs of sexually transmitted diseases, or any other signs of infection.

In the intersexed patient, one should ask if the patient is aware of their particular differences, and/or diagnosis. From this beginning, one can examine the intersexed patient in the conventional manner, or if there is significant SRS/SCS done in early childhood, as the postoperative TS given above. One should allow flexibility of techniques, as well as melding and/or creativity given the IS patients' gender of choice, if one exists, as well as with the presence of existing surgical techniques to aid the person in becoming the gender of ease in childhood. One should also ask the patient if (s)he is sensitive about the examination. If (s)he feels that they are damaged by the SRS/SCS at such a tender age, and proceed accordingly. One must be aware of the extent that a condition is clinically medical hermaphroditism, or pseudohermaphroditism, and then proceed accordingly. In other cases, one can and could use conventional medical examining techniques, but one may hurt or damage the patient in the process, as a result of one's ignorance. It is important to note that to any health care practitioner involved in the care of the transgendered, that a higher than average number of

intersexed patients will arrive at the practice. So, it will pay to read up, or be aware of many conditions found in medical textbooks listed as ' Disorders of Sexual Differentiation “ , and in pediatric endocrinology textbooks, even though the clientele is predominantly adult ,so that one is aware of what can be expected for a particular diagnosis, and alter one's PE accordingly. The scope of such a discussion is beyond the breadth of this paper, except for the advice about combining the TS/TG examination with that of the conventional patient.

In the discussion above, many references were made to particular types of surgeries, as well as with variations in technique resulting in changes in the anatomy of the patient involved. This shall be gone into more detail in the upcoming section on surgery, to answer some questions generated by the previous discussion of the genital examination of the transgendered patient.

One next examines the rectum. One does an initial inspection for erythema, fissures, fistulas, ulcers, hemorrhoids, abscesses, and polyps. One then examine the sphincter for tone, and the anal canal for stenosis, and then checks for any masses or polyps in the walls , as does one for any other patient that walks into the office. However, in the TS woman, one should also examine the prostate , as that organ is retained regardless of which type of surgery is performed. One examines for all the conventional things found in the usual prostate examination of the male. One looks for size, shape, consistency, mobility and masses. Usually, the organ is atrophied as a result of CGHT, and one should also look for a noticeable smoother consistency than found in male patients. One should be especially vigilant in looking for tumors or nodules, as the patient has been exposed to extraordinarily high sexual steroids for a prolonged length of time presurgically, and that those hormones are of those predominant in the gender opposite that of birth. It is not known what the long term effects of CGHT is on the prostate, although one can hypothesize, that since it is part of the chemical castration of the patient involved, and since the medications used are similar to, if not the same in treating prostate cancers, that the risk is minimized. However, since there is no data at the present time it is advisable not to speculate, to note one's findings on a patient, and then proceed to note differences on this patient and others in a longitudinal fashion. One should also not neglect the rectal examination of the intersexed patient, and should proceed to handle it in relationship to the patient' history and medical diagnosis, as well as with modification of the above examination accordingly.

The physical examination of the transgendered patient is not finished. In examining the extremities, one should inspect both upper and lower portions for signs of edema, masses, crepitation or lymph nodes consistent with adrenocortical syndromes, overuse of steroids, immunocompromised activity, as well as for migration of silicon, and connective tissue diseases as a consequence. One should check the hands for palmar creases, and hyperpigmentation indicative of Addison's disease, as well as for the palmar erythema significant for liver disease. One should also look for thenar and hypothenar hypertrophy indicative of hepatotoxicity, and for signs of Dupuytren's contracture as well. One should not neglect looking for Osler's nodules, as a certain segment of the TG population may indulge in IVDA of all types including sexual steroids. One should also not neglect looking for Janeway's spots for the same reason --endocarditis. One should also look at the nailbeds for onycholysis secondary to the hypocalcemia of CGHT in MTF patients. If that individual has a history of IVDA, then the splinter hemorrhages indicative of endocarditis are again significant. One should also not neglect the nailbeds because they may show signs of metabolic abnormalities. It should be remembered that Plummer's nail beds show hypothyroidism (separation of the nail bed predominantly in the ring finger) while Terry's nails (white with normal pink tips) show signs of cirrhosis. The white transverse lines of Muehrcke's nails, show signs of hypoalbuminemia. Whereas the when the proximal portion of the nail is white, and the distal portion is red, it is indicative of ARF secondary to spironolactone abuse or overdosage within the population. Naturally, as a result of the increased rate of thromboembolic disease on the transgendered, Homan's sign should be performed routinely, especially in the lower extremities.

The dermatological examination should not be neglected as well, looking for all signs of metabolic disease, as well as acute and chronic renal failure, and signs of hepatitis. One should also not neglect the lesions found in the immunocompromised patient indicative of herpes, or KS, or any one of a variety of dermatological manifestations found in AIDS patients. In doing so, one should not neglect looking at the size, shape, arrangement, and distribution of said lesions.

Naturally, one should always examine the optic fundi for signs of diabetic retinopathy, hypertensive retinopathy, and arteriolosclerosis. One should also look for changes in the macula densa in terms of color or contours indicative of hepatotoxicity, as well as for any signs of adrenocortical deficiency, or excess by changes in the pigmentation of the macula densa.

One should also do a thorough musculoskeletal examination on the transgendered patient. By that I mean that one should thoroughly check the muscles for strength, and tone, as they may be altered as a result as CGHT. One should also note any signs of hypertrophism, or atrophy as a result of CGHT, and for the presence or absence of any deformities, paresias, or paralysis as a result of injections of silicon. Furthermore, one should also check the bones for any tenderness, masses or deformities, as well as ligaments especially for alterations in laxity or stability. In both MTF and FTM TS individuals, it is especially important to test the knee, as CGHT can alter many ligaments' laxity in that particular area.

The neurological examination is especially important, especially the mental status examination of the individual. This can be done better by many psychiatrists; however the general health care practitioner must be aware of the general level of consciousness of the patient, behavior, thought content, affect and mood, intellectual functioning, memory, judgment, and insight. Grading of the reflexes is especially important, particularly in the TG male, and the sensory examination must be duplicated and performed not just on the general areas of the body, but on the genitalia of the patient both presurgical and postsurgical. Naturally, one must not neglect the traditional examination of the cranial nerves, nor of checking for meningeal or cerebellar defects in the examination. This is important in the presurgical patient, who traditionally receives 2-4 times the hormonal concentration of that person receiving postmenopausal CGHT, and is anywhere from 35 to 45 times more at risk for cerebrovascular accidents than a postmenopausal female or asenescent male.

This concludes the history and physical examination for the transgender patient. While few data has been published regarding the physical examination n particular for this population, one should follow the basics that one has learned regarding physical examination and history from such sources as Bates' and/or the Merck manual.

### **Laboratory Studies and Procedures**

The essential laboratory studies performed during any initial examination should be performed on the transgendered patient. These include the basic chemistry (SMA-7, SMA-10, SMA-16), as well as complete blood counts (CBC), as well as the standard prothrombin time, and activated partial thromboplastin time (PT/PTT). These are important in any patient, but these basic values are of significance to the beginning health care practitioner in treating the transgendered patient. One should also not neglect the standard AP and Lateral chest x-ray, and electrocardiogram, especially prior to long hospitalizations. However, since these tests and procedures are so common to the medical practitioner, we shall go into their particular significance in the later portions of the laboratory text.

The lab studies of significance to this population are levels of the sexual steroids, thyroid function tests, parathyroid hormones, adrenal function studies, connective tissue studies, as well as any studies involving diseases of genetic or metabolic dysfunction on sexual differentiation. Further

studies may be mandated according to the patient under clinical examination, but these are at the discretion of the healthcare practitioner.

The hormones that should be studied at the outset are LH, FSH, prolactin, testosterone (both free and bound), progesterone, estrogens (including total, estradiol, estrone), and pregnanediol. These, along with a buccal smear, provide the best basis for assessing baseline hormonal function in the patient prior to CGHT. The table (see figure 4) goes into the fluctuations of these hormones with CGHT. However, we shall elaborate more details in the subsequent paragraphs.