

# The Young M.T.F. Transsexual

**Includes sexual identification of transsexual children, medical guidelines for the treatment of transsexual children, and the effects of early hormonal treatment, by Annie Richards**

This article discusses the treatment of transsexual boy-to-girl children. When allowed to, such children are almost always able to rapidly and successfully assimilate themselves into society as females. This alone is enough to differentiate them from transsexual women who transition when adult.

It is necessary to distinguish between intersexed infants, who in some cases are assigned a gender contrary to their genetic sex, and gender identity dysphoric (G.I.D., a.k.a. transsexual) children. While very young intersexed infants have no say in their sex assignment or reassignment (which is usually done before they are twenty-four months old), transsexual children consciously reject the gender in which they are being brought up at some point between two years old and puberty.

Since the 1960's - when Dr. John Money, a physician at Johns Hopkins University, made the medical community at least recognise transsexuality - there has been an ever increasing incidence of male-to-female (M.T.F.) reported G.I.D. cases and requests for treatment across all age groups. However in recent years the growth in reported cases among teenagers, particularly boys, has been extraordinary. No one compiles official statistics on transgender youths, but everyone agrees that their numbers are rising very quickly. Undoubtedly this is partly the result of increased access to information. A child today with "gender dysphoria" - the catch-all term for disconnect between body and gender identity, will almost certainly have heard about transsexuals by the time they reach the critical point of puberty. Many children with G.I.D. problems learn about transsexualism from television shows and documentaries and then go online, looking up anything and everything they can find out about transsexuality, and start to chat and email with other transsexuals.

With the increasing awareness and more favourable publicity given to transsexualism, M.T.F. children who in the past would have suppressed their female gender, or at least deferred dealing with it openly until reaching adulthood, are now coming forward while still children. In most cases their families respond positively and supportively, but occasions of outraged parents and internal family battles about how to deal with a would-be daughter will never cease completely.

Unfortunately there continues to be a reluctance in the medical profession to pro-actively treat gender identity disordered children, even when they are diagnosed as "core" or "true" transsexuals. However even the famous/notorious "Standards of Care for Gender Identity Disorders" (which very few medical professionals dare to defy) has now advanced slightly as regards young transsexuals as it reached it's sixth edition in 2001.

While recent trends are somewhat encouraging, young transsexuals (under twenty) seeking and obtaining medical help and treatment are still vastly outnumbered (ten or twenty to one?) by their older counterparts - most of whom bitterly regret their years of delay. Also, young transgirls tend to immediately go stealth after transition, and the girls referred to in this article are exceptionally brave about their transsexuality - or had little choice as they were outed by the media.

## Sex Assignment

A person's sex can be determined or judged by many factors, including:

1. **Legal Sex:** In the U.K. the infamous ruling by Justice Ormrod, determined that this was the sex stated on the original birth certificate - although since 2004 the Gender Recognition Bill has overturned many aspects of this ruling.
2. **Hormonal Sex:** Based largely upon male testosterone plasma levels, or female oestrogen and progesterone plasma levels.
3. **Chromosomal Sex:** Male "XY" or female "XX" genes as determined by a karyotypic study (there are many other combinations).
4. **Internal Sexual and Accessory Organs:** The presence of male (testes) or female (ovaries) gonads, and male (e.g. vasa deferens, ejaculatory ducts and prostate gland) or female (e.g. uterus, vagina, fallopian tubes) accessory organs.
5. **External Sexual Characteristics:** Male (e.g. penis, scrotum) or female (e.g. clitoris, labia majora) appearing external genitalia, and other male (e.g. beard) or female (e.g. breasts) appearing secondary sexual characteristics.
6. **Gender Role:** The sexual role a person lives in, and the sex they are perceived as being. It has been defined as "A social status usually based on the convincing performance of femininity or masculinity".
7. **Gender Identity:** The gender a person identifies with and believes they are.

Factors 6 and 7 are commonly and unfortunately combined under the term "gender-role", but I prefer to keep them separate when possible. A particularly confusing but frequent use of the word "gender" is in the phrase "gender reassignment surgery (G.R.S.)". It's essential to differentiate between a person's physiological sex (factors 4 and 5), and a person's social and mental gender (factors 6 and 7). Surgery can't ever change the latter and the phrase "sex reassignment surgery (S.R.S.)" is a better, although still seriously exaggerating, description of what surgery can achieve.

## Gender

For most children their legal, chromosomal and physical sex agree with their mental gender and preferred gender role ..., but not always. As already mentioned, children with gender identity problems are described as having gender dysphoria.

Establishing a gender identity is a process that most people take for granted, but that no one completely understands.

Scientists and sociologists agree that traditional gender roles are in many ways socially constructed, e.g. girls learn to wear dresses and boys learn to wear trousers. But no one seems to understand what makes a transsexual child raised in a male gender role embrace the female role as her own and vice versa. Nor can anyone explain why many intersexed children raised as one sex eventually migrate back to the gender that their genetics or their prenatal hormonal environment would have predicted.

Bill Summers, a professor of medical history at Yale who studied the science behind gender and sexuality says "You have to learn somehow what it means to be a boy or a girl. You don't come born with the idea. But enough people say, "I always knew I was a boy but I was raised as a girl" that I can't doubt they have these feelings."

Summers points to the work of Dr. John Money who became famous in the 1960s for recommending and surgically facilitating the transition of a young boy [an identical twin] with a botched circumcision into living as a girl - the so called "John/Joan" case. Money initially declared the gender re-assignment to be a success, but his work was later undermined when the girl grew up with a masculine gender identity anyway. Summers notes that "the whole idea [was] that given hormone treatment and the right social environment, you can determine gender identity. It's not really quite so simple."

The bottom line seems to be that sociologists and psychologists still don't know where gender identity comes from or why - but it is unlikely that either biology or society operates totally independently from the other. The only current certainty seems to be that when young children decide that they are a boy or a girl and this decision contradicts their supposed physiological sex, the result is much anguish and cost to the child, the parents and the medical profession.

Young boy-to-girl transsexuals have few doubts about their sex - they know that they are really female and unlike older transsexuals can usually easily pass as such.

## **Sexual Identification of Transsexual Children**

It is important to note that many boy-to-girl "transsexuals" do not consider themselves to be transsexual - indeed they often actively dislike being called such - they just consider themselves to be girls. The reality is that young trans girls often associate the word "transsexual" with television documentaries featuring strange balding middle-aged men, married, with children, who at the end of the programme still look, sound and behave like men wearing wigs, dresses and too much makeup to their very discriminating eyes and standards. Young trans girls simply cannot relate themselves with these examples of transsexuality - their problems are totally different, and passing is rarely one of them.

A key, if obvious, differentiator between transsexuality emerging in children and the far more numerous instances of it emerging in an adult is the pre-puberty age at which noticeable cross-gender behaviour appears in the former group. According to one study, two thirds of transsexual boys are aware that they belong to the

opposite sex and exhibit such behaviour" by age five, and 77% by age ten. Another study of 137 M.T.F. transsexuals confirms these figures, finding 70% exhibited cross-gender behaviour before age ten, and another 20% before age fifteen.

For example Richard ("Richie") always wanted to wear dresses like his sister, when age two and a half his mother caught him trying to cut his penis off with nail clippers, saying "this doesn't go here". At age seven he was finally diagnosed as having Gender Identity Disorder, his parents changed her name to Riley Elizabeth and let her go to school as a girl - where she blossomed from a "sad confused little boy into a happy young girl". The financial burden of Riley's medical care had been crippling, but her parents had no doubts - "seeing Riley's happy face now, it's worth every penny"

It seems that at least three-quarters of gender dysphoric children will eventually have sex re-assignment surgery (S.R.S.).

If clinical testing finds that the following conditions apply:

1. onset of a desire to belong to the opposite sex before puberty;
2. cross gender behaviour and social role without sexual arousal;  
and
3. dislike for one's own secondary sexual characteristics.

then core transsexuality, commonly known as "true" or "primary" transsexuality, is likely to be confirmed and appropriate sex-reassignment treatment should be started. However there still remains considerable reluctance by the medical profession to supportively treat a physically normal boy with gender identity problems - a boy who's adamantly insistent that he's really a girl. The sex re-assignment of babies and very young boys became medically acceptable in the 1970's and 1980's (indeed, perhaps too common) - but has since become discredited and unfortunately there has been a carry over affecting young transsexuals. It seems to often require courageous and forceful parents before doctors will medically facilitate the transition of a minor.

## Parents

An understandable reluctance to "come out" to one's parents remains probably the greatest single obstacle to the early and successful treatment of many trans girls. On the other hand, things do seem to be improving, and television and the Internet are playing a key role in this - these days most transsexual children first learn about "transsexuality" from television programmes. Relating positively to this condition they - and often their parents - seek further information via the Internet and from books.

It is impossible to underestimate how important the understanding and support of parents is for a young transsexual's eventual success in life. It is also difficult to underestimate how much emotional strain having a transsexual child can impose on parents.

Many parents become a pillar of support and understanding, indeed there are many instances of parents going to extraordinary lengths and expense to aid their new daughter - for example moving house so she can go to a different school and avoid anyone who knew her as a boy.

In another positive example, Jamie never felt herself to be a boy, and when at age eleven she finally told her parents "You think that I am a boy, but I am a little girl!", they accepted her choice and she is now living very happily and confidently as their daughter.

On the other hand, there are also instances where the child tells the parents and the result is a nightmare of arguments and pressure. Rachel (formerly Daniel) describes how when she told her parents at age seventeen: "They didn't shout at me but the conversation was very heated. Mum got upset - although she said she'd guessed a while ago - and Dad was annoyed. They both said they didn't want me to dress up in the house and that I'd always be Daniel to them. ... My parents have been good to me, but they'll always see me as their son." Rachel is actually luckier than many girls. Enforced visits to a suitable psychiatrist (suitable for the parents at least) to treat the child's gender disorder are common. Perhaps in a few cases a "cure" is achieved, but

more commonly the child suppresses his/her transsexuality, and if he/she persists then an eventual total rejection by one (usually the father) or even both parents may well occur. For example, Brazilian, Roberta Close, was disowned by her father, and only reconciled years later. While now a successful model and actress, for several years in her teens Roberta descended in to the seedier side of life that all too many transsexual women go through in order to earn a living.

Often transsexual children feel unable to tell their parents about their feelings and needs. This usually means that a public admission of their transsexuality is deferred to adulthood - and the delay is always much regretted. But the resourcefulness of children should not be underestimated. For example, one text book (Man and Woman, Boy and Girl) describes how a woman secretly obtained and took hormones while still a young teenage boy. Her concerned parents eventually took her to a hospital for tests to help determine the cause of the resulting physical changes, but she had had enough warning to stop and let her system clear. The doctors concluded that the changes were spontaneous and natural (some degree of gynaecomastia - male breast development - is quite normal in mid-puberty boys), and told the parents not to worry.

## Medical Guidelines for the Treatment of Transsexual Children

The widely followed W.P.A.T.H. Standards of Care for Gender Identity Disorders, a document which has previously (and increasingly controversially) been against the hormonal treatment of under-sixteens, has relaxed its rules slightly in the latest (2001) Version 6. It now states that:

"Adolescents may be eligible for puberty-delaying hormones as soon as pubertal changes have begun. In order for the adolescent and his or her parents to make an informed decision about pubertal delay, it is recommended that the adolescent experience the onset of puberty in his or her biologic sex, at least to Tanner Stage Two." *[on average this means about age 11 for biologic females, age 12 for biologic males) ...*

"Adolescents may be eligible to begin masculinising or feminising hormone therapy as early as age sixteen, preferably with parental consent. In

many countries sixteen-year olds are legal adults for medical decision making, and do not require parental consent." ...

"Any surgical intervention should not be carried out prior to adulthood, or prior to a real-life experience of at least two years in the gender role of the sex with which the adolescent identifies. The threshold of eighteen should be seen as an eligibility criterion and not an indication in itself for active intervention."

Although still no coming out in favour of starting feminising hormone treatment at a normal puberty age and delaying any sex-change surgery until at least age eighteen, the standards do at least now allow the treatment of very young adolescents with puberty-delaying hormones and thus help prevent the socially and mentally disastrous development of normal male [secondary] sexual characteristics and appearance in an under-sixteen M.T.F. girl.

In its defence, the Standards of Care are clearly and understandably concerned about some instances of unsuccessful boy-to-girl gender re-assignment of intersexed

babies, such as the highly publicised failure of the gender re-assignment of David Reimer (a.k.a. the "John/Joan" case), and want to avoid any future repetition. If a boy is diagnosed as a transsexual then a failure to immediately start treatment is not only deferring the inevitable in the vast majority of cases, but is doing so at a considerable cost to the child's future as a girl and woman. It is indisputable that the earliest possible transition and pre-puberty hormonal and surgical treatment will offer most M.T.F.s massive psychological and physical benefits.

Early transition and commencement of treatment and transition will permit the transsexual boy-to-girl a female childhood, a normal puberty (excluding menstruation) and allow her to enjoy her teenage years as a young woman. It is an absolutely priceless experience if a transsexual girl goes through her adolescence as a female, with a circle of same-sex girl friends. It's a period of time when her personality, identity and attitudes are forming, and the stage for the rest of her life is being set. She will have irreplaceable girlish memories and social adjustments that a transition later in life can never give her. Her life experience will be much more like that of other women, she will be able to talk more easily about parts of her past, her school days, and even have photos to show her future partners. For many girls, denying these experiences to her and enforcing an unwanted male gender is simply disastrous.

One successful transsexual woman "Anna Taylor" describes her early experiences: "It never occurred to me that I was a boy. I just wondered why I had something extra. I had sessions with a child psychologist and my parents were told to bring me up neutrally. My mother tried, but my dad would slap me if he caught me playing with dolls. My mother says that if it had been up to her she would have banged on every door to let me become a girl, but my dad wouldn't stand for it."

Anna ran away from home several times until, aged eight, she went to live with her grandparents who were prepared to bring her up as a girl. At age eleven she started at a new school where the headmaster was very sympathetic and agreed to let her register as a girl. "For the first time no one was laughing at me. From being very withdrawn, I became very bubbly and outgoing. The only allowance they made was that I had to change in a separate cubicle for games and use the teachers' toilets. The school was afraid of another girl seeing something they shouldn't. [But} I got very depressed when the other girls started wearing bras. My own doctor wouldn't prescribe hormones for me at thirteen, so my grandmother took me to Amsterdam to find a doctor who would. Within a few months I'd grown very small breasts. Doctors agreed that I should have had gender reassignment surgery when I was younger but now that I was an adolescent, I would have to wait until I was eighteen."

A recent follow-up study of sex-reassignment in twenty-two adolescent transsexuals (ten started hormones under age sixteen, twelve under eighteen) found that after surgery in all cases all signs of gender dysphoria had disappeared, they scored normally in psychological tests and they were socially functioning well. Not a single girl/boy expressed feelings of regret concerning their decisions to undergo sex reassignment. The study concluded that with careful preliminary screening, starting sex reassignment procedures before adulthood results in favourable post-operative functioning.

## Puberty

Puberty can be defined as the biological developments which change boys and girls from physical immaturity to biological maturity. For a transsexual child an

inappropriate puberty sets a mountain that can never be fully conquered, while an appropriate puberty offers a greatly eased path to gender reassignment, both physically and psychologically.

Puberty is often a nightmare for "gender dysphoria" children according to Cohen Kettenis, Professor of Psychology at the Medical Centre of the Free University in Amsterdam, "They develop an enormous dislike for their body." Most children seen by Professor Cohen react with horror to the changes that occur in their bodies at puberty. It appears that their so-called "transsexual" feelings become much stronger and they do not feel at home in the body that they now developing. Margaret Griffiths of the Mermaids support group says very similar things, "Some girls and boys go through Hell at puberty, they have few friends, they are bad in school, because they can concentrate on nothing, and some have suicidal thoughts."

When Riley (who had been living as a girl since age seven, after threatening to kill himself) was warned by her mother when age ten that in a few years time nature would start turning you in to a man. Her reaction was horrified "Please don't let that happen ... please!".

Although the child may not admit to his transsexual desires at this stage, the parents will often start to have some concerns about their son. The onset of puberty is a critical point as the child is faced with his own undesired physical masculinisation, often combined with a great jealousy of girls and their physical changes.

By age fifteen some 90% are exhibiting feminine behaviour. This is the point where many transsexual children finally admit to their wish to be a girl and they, or their parents, seek help.

One now happily post-S.R.S. girl described how she felt at puberty: "That was the hardest. My own body was staging a mutiny, even." At sixteen she finally confessed to her secret to her parents who took her to several doctors but they wouldn't help, "I knew I couldn't be happy letting my body masculinise on and on. And so at seventeen I graduated from high school and found hormones on the street."

Now twenty-one, Zoe concurs about puberty: "When puberty arrived I was repelled by my erections and deepening voice. At times I felt suicidal. "Jamie Cooper was twelve when she wrote her mother a letter saying that she should have been born a girl, they sought medical advice and were told that it could just be puberty, the feelings deepened but she had to wait until she was sixteen before receiving hormone treatment - she transitioned on her sixteenth birthday.

## **Hormones and Puberty**

Body shape is controlled by oestrogen and testosterone. During puberty, while boys are amassing bone and muscle thanks to their developed testes pumping out androgens (particularly testosterone), a high concentration of oestrogen in the female body results in the typical girl gaining nearly thirty-five pounds (15kg) of so called reproductive fat deposited on the hips and thighs rather than on the waist. Another female hormone, progesterone, also plays a significant and complementary role, most particularly in the development of breast tissue.

Professor Cohen's policy is that if it appears that the gender dysphoria feelings are becoming stronger then puberty blockers should be prescribed to temporarily halt

puberty until they are sixteen. When they are sixteen, and quite certain that they have the wrong body, they can be prescribed hormones as well as to begin to change their outward appearance to more closely match their chosen sex. "After that comes the actual sex-change operation".

## Hormone Treatment for Young Transsexual Girls

Ideally, in order to maximise the physical benefits, low level oestrogen treatment of the young transsexual boy-to-girl should begin at age eight to nine years. Before the onset of male puberty (at about age eleven, but can vary  $\pm$  two years) a bilateral orchidectomy (castration) should be performed to remove both testes and hormonal treatment then increased (additional oestrogen, later supplemented with progesterone) to initiate a female type puberty.

When an orchidectomy is done before puberty, the results in terms of increased physical feminisation and decreased masculinisation are much more dramatic than when it is done after puberty.

Even if this pre-puberty ideal is not possible, the female hormonal treatment of the transsexual boy-to-girl can still have remarkable results if begun while the body is still at its most receptive age - the critical puberty years between about eleven and seventeen (depending on the individual), but the earlier the better.

It is no coincidence that so many transsexual women who famed for their looks had begun taking hormones by seventeen - Jenny Hiloudaki, Tula, Hari-su, Roberta Close, Dana International, etc.

Doctors certainly seem to agree that giving, for example, a thirteen-year-old transsexual boy-to-girl doses of oestrogen will make her physically far more attractive as an adult women. However they also agonise about the possible negative consequences - and perhaps their potential legal liabilities from prescribing female hormones to "boys".

As a poor alternative to beginning full female hormone treatment in a young transsexual boy-to-girl, many medical specialists (who are often reluctant to start irreversibly feminising hormonal treatment until the girl is at least age sixteen) instead prescribe a GnRH analogue such as Zoladex (Goserelin Acetate) or Lupron (Leuprolide Acetate) which prevents or dramatically reduces gonadal hormone production, including testosterone, thus preventing the onset of the masculinising changes of adolescence.

The drugs are normally administered with a nasal spray, or via a weekly or monthly subcutaneous injection into the abdomen. While this treatment does nothing to promote female physical characteristics in the girl, it does at least prevent or greatly slow a male type puberty with its physical effects, and Dutch studies have recently confirmed the effectiveness of such treatment.

Unfortunately GnRH analogues are expensive drugs, but they are preferable for adolescents over the cheaper anti-androgens such as Aldactone (Spironolactone) and Androcur (Cyproterone Acetate) which are commonly prescribed to post-puberty transsexual women.

Young transsexuals often struggle to understand the medical "best practice" guidelines that affect their life. "When Riley was twelve she was to start taking both oestrogen and testosterone blockers. It had been explained to her that this would make her body more feminine! her voice would not deepen and she would develop breasts - but that she would be infertile. Her reaction was "But I can adopt babies why can't the doctors take my testicles off now?"

A rare example of the medical community responding to the needs of young transsexual was achieved in Germany when it was revealed in 2007 that doctors had prescribed puberty blocking and later female hormones to a twelve year old Kim, formerly Tim.

At age two, Tim was trying on his older sister's clothes, playing with Barbie dolls and saying "I'm a girl." By age four Tim was refusing to get his hair cut and wanted to cut off his "thing". For the sake of a normal life his parents increasingly accepted their son Tim as being their daughter Kim. The situation reached a crisis when Kim grew increasingly distressed at becoming like other adult transsexuals with big hands and deep voices whom she thought looked ridiculous when they dressed like women. Her father said "We saw Kim as a girl ..., not as a problem. ... [she] reacted badly to the first signs of puberty ... At that stage we realised that she was terrified of breaking".

Kim's parents decided to help her get a sex change and consulted psychiatrists across Germany. Some condemned their support of their child's desire to undergo a sex change, or suggested that she be kept under observation in a closed psychiatric ward. But Dr. Bern Meyenburg, the head of a clinic for children and adolescents with identity disturbances at Frankfurt University concluded that the child was serious. He wrote in his diagnosis: "Kim is a mentally well-developed child who appears happy and balanced. "There is no doubt of the determined wish, which was already detectable since early childhood. It would have been very wrong to let Kim grow up to be a man."

Dr. Meyenburg had once strongly opposed hormone treatment for children but changed his mind when one of his patients refused to listen and ordered hormones over the Internet, then went abroad at seventeen and had a sex change operation for a few thousand euros. Dr. Meyenburg admits that he was angry at the time, but said that today the woman is a law student and one of his happiest patients. He now allows young patients to enter hormone treatment early, before puberty complicates a sex change. "They simply suffer less," he said, "it would have been a crime to let Kim grow up as a man".

Dr. Achim Wuesthof, who is now treating Kim at a clinic in Hamburg, said: "Imagine a man who suddenly starts growing breasts or a woman who starts growing a beard against their will - that is how Kim and people like her experience puberty."

Kim was thus prescribed female hormone therapy when just twelve, and by age fourteen was fully transitioned and living as a girl - with her identity and medical insurance cards changed to her new name and female sex. By special dispensation she was allowed to have sex-assignment surgery at the age of sixteen although German law will normally only allow this at the age of eighteen.

## Effects of Early Hormonal Treatment

Early hormone use (i.e. during puberty) in a trans-girl allows a typically normal female body shape to develop, with significantly more fat and less muscle than otherwise,

the girls post-puberty body shape and "figure" will become far closer to female than male norms in its proportions. In general, increased levels in the blood plasma of oestrogen and progesterone will stimulate and promote the growth of female secondary sexual characteristics (breasts, fat distribution, pubic hair pattern, ... ) while the reduction in the levels of androgens such as testosterone will, if early enough, completely prevent the development of male ones (deepening of voice, facial hair, muscular development ... ).

Female hormonal treatment has a dramatically greater effect if begun before a male puberty has started (on average age twelve, but plus or minus two years) than after a male puberty has completed (on average seventeen, plus or minus). This is a severe problem given the great reluctance of doctors to assist transsexual patients under age eighteen. Incidentally, the anticipated and achievable benefits from starting female hormones decline rapidly in the decade after puberty ends.

Maximum possible feminisation occurs if hormonal treatment begins just before a male puberty would have started. Very conveniently, girls tend to start puberty two years earlier than their male peers, so high dose hormone therapy intended to initiate a full female type can be safely started by age eleven, although in practice it is often deferred to twelve or even later, particularly if the individual's physical development allows that. If her testes were removed in infancy or childhood, then for health reasons low level hormone therapy should be begun by age nine - an age at which many girls begin to notice some initial puberty changes, in particular the development of breast buds.

As indicated already, surgeons have become very reluctant in recent years to perform a bilateral orchidectomy (castration) on even young intersexed patients, let alone gender dysphoric boys. Failure to do so, however, does accept the slight risk that even suppressed testes might produce enough androgens for a very sensitive body to react to them. The nightmare scenario is a confused body going through a double male and female puberty - the girl's hips broaden and her breasts swell under the influence of oestrogen therapy, but simultaneously her voice deepens and facial hair appears due to the testosterone being produced by her testes.

There seems to be no consensus amongst clinicians as to whether pubertal development is more "natural" in XY girls with oestrogen producing ovaries, than in XY girls (more commonly intersexed rather than transsexual) taking hormone replacement therapy (H.R.T.) following early orchidectomy. This lack of consensus can actually be considered a good indication of the great effectiveness of early hormone therapy.

The reduction in levels of "male" androgen hormones caused by oestrogen treatment will also have some slight effect on the skeleton - reducing male type "ruggedisation" and enhancing female type features, for example slightly broadening the pelvis and helping reduce the girl's adult height (by perhaps an inch or two) compared with her height if she had experienced a male puberty. While hormones play an important role in post-pubertal body shape, however, it's thought that the male "Y" chromosome is mainly responsible for skeletal growth. As a trans-girl is genetically "XY" she will thus still experience some degree of skeletal masculinisation, even if she commences female hormone treatment at eleven or twelve. In general, her physical characteristics as determined by her skeleton (height, skull, hand and foot size) will lie between the male and female norms post-puberty - although more towards the former than the latter. This not necessarily bad as the western idea of feminine beauty is for tall and leggy women. As an adult, the woman will typically be both tall

compared to the average woman (67.5 inches vs. 64.25 inches) and have long legs - both absolutely (32.5 inches vs. 30 inches) and relative for her height, ideal for those girls with ambitions as a model!

In a genetic girl, her increasing production of oestrogen during puberty causes her skeleton to mature so that growth eventually stops. Oestrogen treatment can speed up this bone maturation by accelerating the completion of growth in the growth plates (the zones of growing cartilage near the ends of children's bones) and thus suppresses growth somewhat, by up to two inches. Paediatric endocrinologist sometimes prescribe large doses of oestrogen (usually Eflinyl Estradiol) for a period of several years to deliberately restrict growth in excessively tall girls, and the same technique can be used to help induce in young transsexuals a final height in the typical female range 66 inches - 67 inches. However, obtaining supervised treatment for a transsexual boy-to-girl is difficult, arguing that height is not a disease, endocrinologists are becoming increasingly reluctant to treat even a genetically female "XX" adolescent unless bone growth X-rays show that excessive adult height for a female (over 71 inches) appears likely.

Commencing treatment during puberty will produce mixed results - e.g. the voice may have already deepened irreversibly but facial hair growth is prevented or greatly reduced.

Overall, the physical results of early hormonal treatment should be extremely successful, the girl developing a well feminised physique with full breasts (although rarely as large as the girl would like), no beard, plentiful scalp hair, and an unbroken female type voice. It's difficult to over-exaggerate just how great these advantages are, and how much of a disaster each year of delay is for the transsexual girl whose skeleton and body is rapidly turning in to that of a man. The end of puberty is a fundamental and irreversible physical marker, from which the plausible effects of feminising hormonal treatments on the body of a trans girl/woman decline with depressingly rapid speed. For any transsexual woman starting treatment when already physically mature (and this merely means age twenty onwards), a muscular and robust stature; a deep and masculine sounding voice; obvious facial beard growth; and a receding hairline, are just four of the immediate challenges that may seriously threaten her ability to pass convincingly as a woman. She also faces the high cost of electrolysis, breast augmentation, facial feminisation, etc.

## **Hormone Regimens in Transsexual Girls**

There seems to have been little published research with regard to the dosage of hormones in young transsexual patients, however research which relates primarily to Androgen Insensitivity Syndrome (A.I.S.) patients may be applicable to transsexual girls. Zachmann et al. cite one A.I.S. patient who had undergone orchidectomy in whom oestrogen administration was started at the earliest estimated pubertal age of 10.3 years in the form of Premarin 0.625mg three times weekly. It was found, however, that this stopped growth of the girl prematurely and the authors felt that it would have been better to have given the patient 0.005 - 0.01mg ethinyl oestradiol daily, instead. From studies of patients with Turner syndrome it has been suggested that to ensure normal pubertal growth, physiologic oestrogen replacement should be started at the appropriate bone age of about eleven years and should not be delayed in the hope of achieving a greater mature height. Batch et al. suggest a regime of five micrograms of ethinyl oestradiol daily for the first six months, increasing to twenty micrograms daily by the end of puberty.

Soule et al. suggest that the best course of action may be to perform an orchidectomy just before puberty (at eleven years in a case quoted) followed by oestrogen therapy with regular bone density measurements. This policy, it is suggested, reduces any slight risk of malignant transformation of the gonads and ensures adequate oestrogen activity throughout the critical years of bone accretion.

Oestrogen levels are, however, higher in XX girls than in XY boys, even in childhood. XX girls start producing oestrogen at eight or nine (i.e. a year or two before breast development) so several clinicians therefore recommend early oestrogen supplements in XY girls, irrespective of whether or not the gonads are in place.

Early hormone treatment is not a miracle, but the benefits such as female hair pattern, breast development no beard growth, no Adams apple, no broken (deep) voice, are immense.

## **Females Hormones and Attractiveness**

A very awkward problem for psychologists advocating delayed hormonal treatment for young trans girls is that as result they will be physically less attractive as a woman to men.

There is a strong and direct correlation between the level of a girls oestrogen levels during puberty and how attractive and feminine she is perceived as a woman. For example the hormone has lasting effects on bone growth and tissue formation as well as the appearance of the skin during the average seven-year-long puberty. Miriam Law Smith of the University of St. Andrews states the hormone has a crucial role in determining facial appearance, giving thirteen-year-old's doses of oestrogen will "certainly make them more attractive [to men]" although she adds "who knows what other effects the hormone may have?" As regards the last comment, pubertal girls who have been prescribed oestrogen to prevent excessive height (over six feet) may, according to one study, subsequently suffer from lower fertility.

## **Passing and Sexual Orientation**

There seem to have been no formal clinical studies, but it seems certain that young male-to-female women are far more likely to complete their transition and settle well into their new lives than those who transition at a later age. It is also very likely that a far higher percentage of young transsexual women identify themselves as heterosexually attracted to men than when compared to older transwomen.

About 95% of natal "XX" women consider themselves as being heterosexual. By comparison, studies of the sexual orientation of post-S.R.S. transsexual women indicate that only half are heterosexual and exclusively select males as sexual partners; nearly one-fifth are lesbian and sexually attracted only to females; and about one-third are bisexual. However these studies cover all age groups (with an average age in the thirties or even forties), and are almost certainly not representative of the relatively few young transsexuals who transition before the completion their male puberty. For under twenty-ones, I would suggest that there are very few girls who do not consider themselves to be heterosexual, and have or would like to have, a boyfriend.

Unlike older transsexual women, young transsexual girls rarely have had any sexual activity before they transition, and if they do it's likely to be of a homosexual nature,

generally playing a female role during intercourse. Mentally they are often only erotically stimulated by men, although overall their sexual urges may be very low because of puberty suppressants. When released from such drugs and placed on hormone therapy, they become just as interested in boys and men and sex as other girls of their age - if not more so. "G", a nearly sixteen-year old trans girl undergoing an intense female puberty thanks to being on hormones illicitly obtained by her parents, may be quite typical when she writes: "I can't stop thinking about my [neo-vagina] ... I want to be ["screwed"] by any guy in sight. I was even thinking about my teachers and my best friend's dad." But this girl does not expect to undergo S.R.S. for years yet.

Unlike older transsexual women, young transsexual girls rarely have any problems passing easily and naturally and assimilating themselves as women. For example, in one survey (*Sex Reassignment of Adolescent Transsexuals: A Follow-up Study*, Cohen, 1997) of young transsexuals, all the male-to-females were satisfied with their appearance after hormone therapy, and it was the interviewer's observation that it was difficult to discern any signs of their [genetic] sex. Most of the girls had been approached in a flirtatious manner, and not one had been approached by strangers as if they were still of the male sex, 60% expressed satisfaction with their vaginoplasty, and had experienced sexual intercourse without problems. The author of the study suggested that part of the adolescents' success was due to the fact that they more easily pass in the desired gender role because of their convincing appearance. With one exception the voices of the girls were not male sounding, and early anti-androgen treatment apparently had acted in a timely way to block facial hair growth and the lowering of the voice.

Somewhat disputably, the study also stated: "Another aspect of this relatively positive outcome may be attributable to the criteria for treatment eligibility. ... [The] patients selected for early treatment not only are among the best-functioning applicants, but probably they also belong to the sub-type of so-called "homosexual transsexuals" (that is, individuals who are, before S.R.S., sexually attracted to same-sex partners) ... They are also referred to as "primary" or "early-onset" transsexuals."

An early transition seems to make passing and relationships with men much easier.

Nevertheless, success in passing may well be an important factor in young trans-girls being far more likely to have a heterosexual sexual orientation than transsexuals who transition as adults. It's clear that trans-women who transition at a young age are almost always physically able to go stealth, they typically do as soon as possible, and often quickly begin to have boyfriends and eventually a husband. The desire for a normal relationship with a man tends to pull the transwoman away from any open acknowledgement of her transsexuality and male past, as she feels (unfortunately often correctly) that the relationship may not survive the revelation. In the balance between personal happiness and revealing "the whole truth and nothing but the truth", most people choose happiness. The experience of this site is that when a young transsexual outs herself, she often soon regrets it - and for good reasons.

## **Sex Re-assignment Surgery**

After hormones and transition, the next and final step is sex-reassignment surgery. Extraordinarily, only about 1% of S.R.S. operations performed by western surgeons are on girls under age twenty (and almost all of these are eighteen or nineteen). The reasons seem to be a combination of the Standards of Care guidelines, the need for a two year real life test when a hormone supported transition can only begin no

earlier than age sixteen, money, the requirement for parental permissions in some countries, the reluctance of surgeons to operate on very young transsexuals, and the extreme rarity of under-twenty (or indeed under twenty-five) surgery candidates compared with older candidates - the median average age of European transwomen at the time of their S.R.S. is mid-to-late thirties, with a mean average age of around forty.

By interesting contrast, one study of 195 Thai male-to-female transsexuals found that "many participants had transitioned very early in life, beginning to feel different from other males, and identifying as non-male by middle childhood. By adolescence many were living a transgendered life. Many took hormones, beginning to do so by a mean age of 16.3 years, and several from as early as ten years. Many underwent surgeries of various kinds, on average in the twenties, with one undergoing S.R.S. as early as fifteen years".

Clair (formerly Alex) Farley told her parents that she was gay when she was thirteen. After a suicide attempt at age fifteen she told a counsellor "I feel that I should be a girl". She finally transitioned at age eighteen and began hormones. "My hips widened, my thighs thickened and tiny breasts started to appear". She finally had her S.R.S. at age twenty-three, "a few days later I pulled out a hand mirror and got a first glimpse of my new vagina, it was badly bruised but I couldn't have been more excited, I was all woman".

## Parental Support - Changing the Rules

Considering all the advantages of early treatment of the young transsexual, it's unsurprising that it is now increasingly demanded (and obtained) by increasingly knowledgeable transsexual children and their parents. Sources such as the Internet and television documentaries mean that children and parents are often no longer accepting as gospel the advice of an experienced and over-loaded doctor or psychiatrist. For example in 1997 there were an estimated 600 transitioned transsexual children (usually defined as under eighteen) in the U.K. A few years earlier the acknowledged figure would have been a handful. Another study published in November 2005 suggested that there were 2000 young transsexuals in the U.K. age fifteen-nineteen - although with no further definition of their status. [Note: The figure of 600 excludes the very small proportion of "XY" intersex children born in the U.K. with ambiguous genitals who are assigned to the female gender by doctors while still babies, perhaps twenty-forty each year deriving from U.S.A. figures. There are also many children with "male" genes who were identified at birth as female and then brought up as girls, for example there are perhaps 3000 "XY" women in the U.K. who were born with Androgen Insensitivity Syndrome.]

Supportive parents are undoubtedly influencing a "system" and a medical profession that was in the 1990's retreating rapidly from early treatment and accommodation of young transsexuals. After a decade-long reaction to the tragic David Reimer affair, it has become recognised that it is necessary to separate and differentiate between the voluntary and non-voluntary gender reassignment of children. While numbers are still small, there is nevertheless an increasing willingness by doctors and the "system" to support and aid the early reassignment of children. The revised guidelines in the current version 6 of the "Standards of Care" issued in 2001 makes it slightly easier for young transsexuals to officially obtain treatment, including puberty-delaying drugs.

But doctors still face circumstances where a failure to support young transsexuals in order to comply with guidelines can seem at best totally unreasonable. For example, in 2006 a five-year-old boy was allowed to enrol in kindergarten as a girl with a "gender-neutral name" in Florida, U.S.A., having been diagnosed with gender identity dysphoria (G.I.D.) two years earlier. The parents said the child refused to wear boy's clothing and repeatedly said she hated having a penis - often trying to hide it between her legs. Officials said that were already a number of trans students in the school system but none as young as kindergarten age, they expected that the youngster would go unnoticed as a girl. Can she be denied female hormones at age eleven-twelve?

Meanwhile, in Japan a seven year old boy with G.I.D., Ryoko Kanda, was allowed to enrol as a girl at a school in the prefecture of Hyogo, about 270 miles west of Tokyo after being diagnosed with gender identity disorder at age six. The school has not told other parents about the switch, and a spokesman for the local school board said there had not been any complaints from other students or from the boy's parents since his enrolment. He stated that the boy's name is listed with girl students, she uses the girls' bathroom, attends a girls' gym class and wears a girl's swimsuit at the school pool.

The official also said "At this point, we are relieved that the child was accepted into [second] grade and is being raised in a healthy manner", he added that the school district would watch his case closely and reassess the decision as the boy reaches puberty. Katsuki Harima, a psychiatrist specializing in gender identity disorder, said the decision to allow the boy to enrol as a girl seemed appropriate, but would get complicated as he grew older. Harima said the boy is not old enough to determine whether he really has the disorder. A boy who behaves like a girl does not necessarily have gender identity disorder and he could discover as he grows older that he wants to be male.

## Conclusion

There is no doubt that for the best possible final outcome, the sex-reassignment treatment of a gender dysphoric (i.e. transsexual) male-to-female boy/girl should be started as early as possible - ideally before puberty. Compared with the experiences of older transsexuals, the results are often almost magical. All the current evidence indicates that the under-eighteen trans girl will identify totally with her new female gender and appearance, passing well both psychologically, socially and physically; and be far more happy as a female and have no regrets. She will still face problems of course, such as hiding her lack of periods and admitting her inability to bear children to a potential husband, but these are a totally different set of problems from what a decade's delay would have imposed upon her - such as an inability to pass due to her beard, deep voice, a bald patch, in addition to having a wife and children. The Cohen study mentioned above concluded: "Even adolescent applicants who are functioning well will need a lot of guidance through the process of sex reassignment. However, provided they manage to pass S.R.S. without problems, they have a lot to gain. They can catch up with their peers and devote their attention to friendships, partnership, and career." It is unfortunate that the medical profession, while also advancing, is doing so very slowly, partially due to a lack of facilities and specialists. In the U.K. only one National Health Service Gender Identity Clinic, the Portman and Tavistock Clinic in London, is able to offer specialist psychiatric and endocrinology services for transsexual children - and this for a population of fifty-eight million people!

Despite the improving situation - the transsexual who transitions while still under the age of eighteen rather than older remains very much the exception rather than the rule.

Final Note: I would like to give a huge thanks to all the girls who have contributed to this page in some way.

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