

Causes of Ambiguous Genitalia

What Makes a Eunuch

Every foetus, whether genetically male (XY) or female (XX), starts life with the capacity to develop either a male or female reproductive system. All foetuses have non-specific genitals for the first 8 weeks or so after conception. After a few weeks, in an XY foetus (without AIS), the non-specific genitals develop into male genitals under the influence of male hormones (androgens).

In AIS, the child is conceived with male (XY) sex chromosomes. Embryonic testes develop inside the body and start to produce androgens. In AIS, these androgens cannot complete the male genital development due to a rare inability to *use* the androgens that the testes produce so the development of the external genitals continues along female lines. However, another hormone produced by the foetal testes suppresses the development of female internal organs. Thus a person with AIS has external genitals that in Complete AIS (CAIS) are completely female or in Partial AIS (PAIS) are partially female. Internally, however, there are testes instead of a uterus and ovaries.

So in a genetically male (XY) foetus the active intervention of male hormones (androgens) is needed to produce a fully male system. A female body type with female external genitalia is the basic underlying human form.

In about two thirds of all cases, AIS is inherited from the mother. In the other third there is a spontaneous mutation in the egg. The mother of the foetus, who does not have AIS but has the genetic error for AIS on one of her X chromosomes, is called a carrier.

Do we really need to know the cause in order to treat the condition?

Why is there so many fixations on 'causes'? The answer is simple: Transsexualism has been such a socially unpopular condition in the past that the issue of 'what causes it' is always raised in discussions about what to do about it. In the past many behaviourist psychologists and psychiatrists have inherently blamed transsexuals for causing their own 'sexually deviant mental illness', giving those psychiatrists a claim to responsibility

for the 'treatment and cure of transsexuals' and giving society a rationale for discrimination, marginalization and ghettoization of transsexuals.

However, as we've seen, transsexualism is most likely a neurological condition of as yet unknown origin and not a 'mental illness'. There are many other intense neurological conditions such as pain, depression and bipolar disorders for which we do not know the underlying causes but suspect biological causes. We know that these other conditions are real because we see people in distress and we treat those people medically and with compassion to relieve their suffering.

Why should it be any different with transsexualism?

We now know how to relieve the suffering of transsexual people, having many options for practical counselling, social transition and hormonal/surgical gender reassignment. Why not accept those treatments as valid, since they truly relieve suffering and enhance the quality of life, even if we aren't sure what causes the underlying condition? And why stigmatize people just because they have sought medical treatment for this condition?