

Development of Sexuality

Structure

- The gonads of the early embryo can develop into either testes or ovaries. It seems that the ovary develops unless hormonal conditions at a certain stage of development 'switch' on the testis, as it were. That is, the female is the default setting. Very rarely (1 in over 80,000 births), an individual may have an ovary on one side and a testis on the other, or a gonad may contain both ovarian and testicular tissue.
- The ovary stays more or less where it started, but the testis descends into the scrotum. Undescended testes, this descent having been arrested, are common: about 3 in 100 male births. In a sense, an undescended testis signifies incomplete male development.
- The clitoris and penis both develop from the same embryonic precursor. The female, again, seems to be the default setting. Penile congenital anomalies such as hypospadias, where the opening is on the under surface of the penis, are surprisingly common (some say 1 in 300 male births). They can be regarded as varying degrees of reversion to the female anatomy. How small does a penis have to be before it is a clitoris?
- The scrotum and the labia majora develop from the same structures: the scrotum is the two labia 'sewed' together (you can see the 'seam'). How large do labia have to be before they become scrotum-like?
- Every adult male prostate gland contains a vestige of the precursor of the uterus.
- Every adult female has structures that in males develop into the tube conveying spermatozoa from testis to penis.
- Some people are born with external genitalia of one sex, and internal genitalia of another. Or a person may be born with genitals that seem to be neither one thing nor the other—a girl may be born with an abnormally large clitoris, or lacking a vaginal opening, or a boy may be born with a small penis, or with a divided scrotum, like labia.
- Structural anomalies in the male are more common than in the female, though you may recall the fuss last year about the South African 'female' athlete who was reported to lack both ovaries and uterus.

Chromosomes

- Normal male: XY chromosomes
- Normal female: XX chromosomes
- Anomalies. The incidence of newborns that are neither XX nor XY has been put at about 1 in 1700. Here are some examples:
 - XXX: 1 in 1000. Female, often no other manifestations.
 - YYY: 1 in 1000. Male, often no other manifestations.
 - XXY: Klinefelter's syndrome. 1 in about 1000, often sterile, males with female fat distribution. May never be diagnosed, so may be commoner than we think.
 - XO: Turner's syndrome. 1 in about 3000. Appear female, nearly always sterile.
 - Mosaic, some cells XX, some XY. Very uncommon.

Psychological sex – 'what do I feel or experience?'

We know very little. It seems that a part of the brain may be switched on to 'I think I'm a male' at a certain stage of development. It seems, again, that the female is the default state. There are reports of people who feel as if they have been born into the body of the 'wrong' gender. There are reports of an area of the human brain that in homosexual men is more like that of heterosexual women than that of heterosexual men: male body, female brain perhaps.

- If a man admires, or even envies, the muscularity of a male athlete, does that mean he is an homosexual?
- If a woman admires a Rubens lady of generous proportion, does that mean she is a lesbian?

Defining man/male and woman/female

We simplify sex categories into male, female, and sometimes intersex, for cultural purposes. This is unsubtle. There is much scope for naturally occurring structural and chromosomal anomaly, and a spectrum of psychological sex.

Pleasure

To what extent did Biblical writers and early readers associate procreation with sexual intercourse? In Biblical times, the roles of ova and spermatozoa were not as we know them today. It was held at one stage that semen merely initiated the development of the embryo in the mother, and at another stage that a spermatozoon contained the miniature human and that it was 'injected' into the mother, who was merely the vessel in which the embryo grew. (As an aside, both these shed interesting light on notions of virgin births in Biblical times, even accepting that virgin is the correct translation.) This matters to the same-sex debate, because it is relevant to whether or not Biblical people recognised the importance of

pleasure in sexual intercourse—what we might term the psychological effects that come from the flood of endorphins released in orgasm.

If we say that sexual pleasure is banned, and that intercourse is only for the purpose of procreation, then intercourse must be restricted only to those times in the menstrual cycle when conception is possible. This turns current RC teaching on its head, and using the safe period for the avoidance of conception is just as much a 'sin' as is using a condom.

So, how do we define man and woman?

- Inspecting genitalia mightn't give a definite answer, and who would be daft enough to suggest it?
- Chromosomal tests might not be a reliable indicator of what gender the person *feels*.
- Assessing the ability to engage in vaginal intercourse might do the trick. Doubtless diocesan assessors could be appointed. If one or both partners were infertile, then intercourse would be only for pleasure, so there might have to be pleasure police.

Conclusion

If we say we are certain, we deceive ourselves, and the truth is not in us.

W S Monkhouse
August 2013