Gender verification – what purpose? what price?

Against the background of mounting disquiet and opposition to the policy of gender verification of female competitors it is gratifying that the Council of the International Amateur Athletic Federation, meeting in Toronto in May 1992, determined that in future no 'so-called femininity tests' would be conducted at IAAF competitions. However, the International Olympic Committee, the instigator of the sex test, has yet to see reason and relinquish its insistence upon the screening of all erstwhile female competitors in order that their gender may be 'verified'.

The newborn infant has its gender identified by the ritual inspection of its external genitalia by those assembled to supervise the birth. This crucial decision confers on the child a sexual identity which determines the attitudes of family and society to the individual in respect of its gender role. Ambiguity of the genitalia at birth requires the most sensitive of professional attention until gender can be confidently ascribed through appropriate investigation. Doubt as to the gender of their offspring may seriously impair the establishment of early relationships and normal emotional development.

For most the recollection of this moment is non-existent and in no other walk of life is there a requirement that an individual's external genitalia be inspected for the purpose of authentication of gender. Indeed, very powerful legal forces can be mobilized on behalf of individuals who believe that they have been discriminated against because of their gender. However, it was just such an examination that was used to vet female athletes when sex testing was first introduced in 1966, at the European Championships in Budapest and, in the same year, at the Commonwealth Games in Kingston, Jamaica. The rationale behind the test was to exclude fraudulent males and individuals of uncertain gender who might have a physical advantage over normal female competitors. It was also purported to be in the interests of equal opportunity and the protection of legitimate female competitors. According to a member of the International Olympic Committee's Medical Commission, there was a need to allay public anxiety that had been engendered by women athletes whose physique was considered to be more masculine than feminine.

The physical genital examination was a degrading experience for female athletes and the subsequent outcry resulted in the test being withdrawn in favour of the buccal smear test in 1968.

It is hardly surprising that the new test was regarded as acceptable in that it was non-invasive,

inoffensive and perceived to fulfil the need to protect female sportswomen against unfair competition. For the vast majority of female sportswomen the result of the test simply confirmed what they had never doubted although many carried several gender verification certificates as testimony to the lack of standardization of screening with the result that no one would accept the results of tests carried out in other countries.

The buccal smear test, with identification of sex chromatin (Barr body) as evidence of at least two X chromosomes, is the screening test which has been carried out at Olympic, Commonwealth and European Games since 1968. A negative test (absence of sex chromatin) required that the athlete be withdrawn from competition citing 'personal reasons or injury' and offered further examination and counselling by an approved official doctor, a geneticist and a doctor from the athlete's governing body. On the face of it this process seemed reasonable but there are no data to indicate how many athletes have 'failed' the screening test since its introduction in 1968, nor how many of those took up the offer (if made) of further evaluation, nor of their ultimate fate.

The investigation and counselling of women with suspected intersexual conditions is a most delicate process and every effort is made to avoid the reassignment of gender. For the unfortunate female athlete, at the pinnacle of her career, about to represent her country at an Olympic Games, the psychological impact of failing the sex test, interpreted as implying that she is male, is so devastating that instant anonymity is sought and the individuals disappear without trace – their lives destroyed.

What has the gender verification process achieved? Based on the known incidence of intersexual states it seems probable that about 1 in 400 women have been excluded from Olympic competition since the introduction of screening. The majority have almost certainly been discriminated against unfairly since the absence of sex chromatin, although characteristic of the male, is encountered in a number of intersexual conditions (Hipkin, p. 150 this issue) where no advantage would be gained as a result of the chromosomal aberration in an ostensibly female individual. Ironically the presence of sex chromatin in a phenotypic male with Klinefelter's syndrome (XXY) would legitimize that individual for competition in female events. Eva Klobukowska was banned as a result of the genital ambiguity found on physical examination at the European Championships in 1966 – had she first appeared in 1968 she would have passed the buccal smear test.

Those who would support continued screening contend that it is necessary to detect male-to-female trans-sexuals who might enter female sporting

events. Such individuals have almost invariably undergone orchidectomy and oestrogen therapy is instigated in order to encourage breast development and a female physique. While one must acknowledge that deception is possible it would be exceptional for such an individual to jeopardize their gender transformation by muscular development as a result of training for major events.

Considering the evidence of widespread use of performance enhancing drugs in sport, particularly anabolic steroids, gender verification is a bizarre form of discrimination which identifies individuals who, through a quirk of genetic fate, have a sex chromosome endowment which is at odds with their sex of rearing. One has only to look at the enormous variation in physique in both sexes to appreciate that 'unfairness' is more often attributable to autosomal genetic variation, irrespective of the sex chromosome complement. There are also those women who have mild degrees of congenital adrenal hyperplasia or, much more commonly, polycystic ovarian syndrome whose endogenous production of androgens might be considered to offer a degree of performance enhancement such that screening for these conditions should be considered.

Most female athletes are ignorant of the limitations of the test that is presently undertaken and of the disastrous emotional and social consequences for the individual who has the misfortune to fail. Only one athlete with an XY karyotype and testicular feminization, Maria Patino of Spain, has had the courage to publicize her plight in her fight for reinstatement after being barred from the World Student Games in Tokyo in 1985. There are now some stirrings of awareness among women athletes that there is something fundamentally offensive about the requirement of proof that they are female.

The IAAF has decided to discontinue gender verification on the basis that a fraudulent male would be most unlikely to escape detection given the style of

athletic strip favoured by women athletes today, but also that the drug testing procedure requires the observance of the act of micturition which would allow the identification of any inappropriate appendages! However, there are moves to replace urine with venous blood for drug testing and this would be something of a test of the IAAF's resolve in its change of policy.

Despite the considerable amount of genetic, gynaecological and psychological evidence that can be mustered in opposition to the process of gender verification the dinosaurs of the International Olympic Committee and its Medical Commission seem determined to pursue their current policy. At the Albertville Winter Olympics in 1992 a laboratory was commissioned by the IOC to subject buccal smears taken from women competitors to a new test which identifies the DNA sequences on a Y chromosome if present. The test (polymerase chain reaction) is fraught with potential inaccuracies due to its hypersensitivity and susceptibility to artefact, but the IOC has yet to publish the results of its evaluation.

The IOC has steadfastly refused to provide even simple numerical data on the outcome of the testing process since it was first introduced. Confidentiality clearly must be respected but without information on the fate of those women who were barred as a result of failing the test the IOC has no evidence upon which to support its contention that screening should continue. A cynic would suggest that the IOC has no such information and that gender verification should be scrapped. In this respect the IOC Medical Commission needs a few cynics among its members!

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