

Gender Verification for the 1988 Winter Olympics

In 1968, the International Olympics Committee began to require that individuals taking part in women's sporting events have their female gender confirmed. This has been done by examining a buccal mucosal smear for evidence of X and Y chromatin. If a test is inconclusive, then further testing must be done by the International Olympics Committee Medical Commission. Several recent articles have suggested that there are major technical pitfalls to the use of X and Y chromatin analysis for this purpose. This type of testing for gender is inaccurate and expensive but, just as important, does not deal with phenotypic females, such as those with 45, XO Turner syndrome, XY gonadal dysgenesis, and androgen insensitivity syndromes in which individuals are raised as females but have negative buccal smears. Nor does it deal with XX males who have been raised as phenotypic

males. Although complete genetic studies could address the technical concerns, this approach of gender verification does not deal with the psychological aspects of the individual competitors who, if they have a genetic disorder, have nevertheless been raised during their lives as members of the gender to which they have been assigned. Nor does it deal well with the competitor who intentionally wants to deceive the International Olympics Committee. It has been suggested that a simple physical examination and inspection by a physician would be less expensive and be just as accurate in establishing gender. Presumably, the intent of sex determination by the International Olympics Committee is to prevent unfair competition from a male posing as a female and using his superior muscle strength to unfair advantage. The male imposter could be easily identified by means of physical inspection, and this would appear to be less costly, more efficient, and a simpler method of gender verification.

1. Lowry RB. *Bulletin of the Hereditary Diseases Program of Alberta* 1986;5:9.
2. de la Chapelle A. *JAMA* 1986; 256:1920-1923.
3. Simpson JL. *JAMA* 1986;256; 1983.

Editor's comment—*The International Olympics Committee's decision to use a screening test must have arisen from an unfortunate experience. However, using an outdated, expensive, and unreliable technique to verify gender seems to be inappropriate.*

The Lawson Wilkins Pediatric Endocrine Society has addressed this issue during its annual meeting. A resolution urging appropriate athletic competition sanctioning bodies to discontinue the use of sex chromatin tests for verification of "athletic gender" and to convene an international conference of sports and medical experts to develop more appropriate and sensitive criteria to verify female gender for athletic competition was presented at the meeting; the resolution passed.