Reviewer's report

Title: Deletions in the Y-derived amelogenin gene fragment in the Indian population

Version: 1 Date: 9 February 2006

Reviewer: John S Waye

Reviewer's report:

General
The authors confirm earlier observations that a small percentage of phenotypic males exhibit a "female" amelogenin genotype using commercial DNA typing kits. This observation has been made in several populations from the Indian subcontinent, although there is no reason to conclude that it is limited to these populations. As with previous publications, the authors caution that a "female" amelogenin genotype is not always a reliable predictor of a female phenotype. Conversely, a "male" amelogenin should not be considered an absolute indicator of phenotypic maleness. For example, individuals with complete androgen insensitivity syndrome (OMIM 300068) are phenotypically female yet have the 46,XY karyotype and a "male" amelogenin genotype.

The interpretation of amelogenin genotypes, as with any laboratory test, must take into account the potential for false results (i.e., phenotypic males having the "female" amelogenin genotype, and phenotypic females having the "male" amelogenin genotype). Problems only occur when the amelogenin genotype is used as an absolute indicator of phenotypic gender, failing to recognize the occurrence of rare exceptions.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

What next?: Accept without revision

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.