Reviewer's report

Title: More men than women make mucosal IgA antibodies to Human Papillomavirus type 16 (HPV-16) and HPV-18: a study of oral HPV and oral HPV antibodies in a normal healthy population.

Version: 1 Date: 10 February 2006

Reviewer: Reinhard Höpfl

Reviewer's report:

General

HPV vaccines are imminent, therefore the question posed by the authors is of great interest, since only a few epidemiologic data on oral HPV infection exist. In addition, there is need to elucidate mucosal humoral immune mechanisms against HPV, with only scarce data available in the literature. It is a conceivable approach to analyse the natural history of HPV infection by studying different age groups of patients. This could help to get some hints on the time course of this potentially ubiquitous but silent infection.

The paper contains some new but incomplete scientific information and PubMed search revealed no hint for duplication. The methods applied are adequate: The number of patients is sufficient and the DNA analysis applied is diligent. Antibodies to HPV-VLPs are quite specific and can indeed answer epidemiologic questions. However, the assay with oral fluids may not yet be a reliable alternative to serum testing (Cameron et al.; Zitation 12).

Discretionary Revisions (which the author can choose to ignore)

It would be of interest to discuss the potential of crossreactivity of HPV11 antibodies with HPV 13 VLPs.

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

Page 10, line 1 … population in (eliminate!) is …. 

Page 11, line 2 … to substantiate this, almost …

The discussion is somewhat confuse and could be presented in a more structured stil.

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

The major draw back of the study is, that there are no data shown on cervical diseases or serum antibodies in the patients. This appears to be particularly problematic, since there is no defined control population, and also no well characterised positive or negative oral fluid for control purposes available for the test. It is also unclear how many men of the study are homosexuals, which is important to know, since MSM are known to have increased antibody responses to HPV. Therefore the scientific output of the (in principle!) very interesting study is disappointing. Consequently, - and this is stated completely correct by the authors - Marais et al. write in their conclusion, that they believe only, and also postulate but not conclude something.

One way to bring out the best of the situation would be to analyse the existing data more profoundly,
particularly the correlation of IgG to IgA. In addition, I propose that at least in a subgroup of patients clinical data (questionnaire, correlation with gynaecological history - Pap results) should be included. Even more useful if achievable would be a correlation of oral fluid antibodies with cervical antibodies and/or serum antibodies in some of the patients.

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No

**Declaration of competing interests:**

I declare that I have no competing interests

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