

Title:	Human Papillomavirus Testing In Women With Cytological Prediction Of Low-Grade Abnormality, August 2002
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Aim

To assess the safety, effectiveness and cost-effectiveness of HPV testing in women with cytological prediction of low-grade abnormality.

Conclusions and Results

Safety No risks were associated with the test itself. Safety issues are the same as those for Pap smears because the method of collecting cellular material is the same.

Effectiveness A systematic review concluded that HPV testing is more sensitive but less specific than cytology, although current evidence would not support widespread implementation. Although it was inappropriate to calculate an overall summary statistic as primary studies reported varying positive thresholds for HPV testing, pooling four of seven studies revealed a sensitivity of 92% (95% CI: 87%, 97%) and specificity of 54% (95% CI: 50%, 57%) in detecting lesions that were moderately dysplastic or worse. These results should be interpreted with caution as studies failed to meet all validity criteria, which may result in non-appraisable bias. Additional high quality studies using an acceptable reference standard, such as histological confirmation of cytology results, would be useful in allowing a valid and reliable judgement of the sensitivity and specificity of HPV testing in this population.

Cost-effectiveness A decision analytic model indicates that HPV testing is both more expensive and less effective in detecting high-grade lesions than the management plan currently recommended by the NHMRC, but the model is particularly sensitive to the estimated prevalence of high-grade lesions in women.

Recommendations

There is currently insufficient evidence to support public funding at this time for the use of the HPV test for triaging of women with equivocal cervical screening results.

Method

MSAC conducted a systematic review of medical literature using the Cochrane Library, Medline, PreMedline, Current Contents, Biological Abstracts, CINAHL and EMBASE databases from January 1999 - April 2002 to identify the accuracy of the test and its usefulness in the context of the current Australian cervical screening guidelines. Assessment of clinical effectiveness relied on one secondary study and seven primary studies. Assessment of cost-effectiveness was based on both review of a submitted model and a decision analytic model simulating the cost-effectiveness of HPV testing in women with cytological prediction of low-grade abnormality.

DRAFTING NOTE: