

Title:	Liquid Based Cytology For Cervical Screening, August 2002
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Aim

To assess the safety, effectiveness and cost-effectiveness of liquid based cytology (LBC) for cervical screening.

Conclusions and results

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

Effectiveness There was insufficient evidence to draw definitive conclusions regarding the diagnostic characteristics of LBC and Pap smears for cervical screening. The lack of high quality evidence on the performance of LBC does not permit evaluation of whether it is equal or superior in effectiveness to Pap smears. Further high quality studies using an acceptable reference standard, such as histological confirmation of cytology results, would be crucial in allowing a valid and reliable judgement concerning the sensitivity and specificity of LBC.

Cost-effectiveness A decision analytic model indicates that LBC is associated with greater costs per woman than the Pap smear. Since there is insufficient evidence to support a claim that LBC is superior to Pap smear in detecting high-grade lesions or invasive cancer, it follows that there is no evidence to suggest that LBC would be cost-effective at the proposed price.

Recommendations

There is insufficient evidence to support public funding of liquid based cytology for cervical screening at this time.

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 2000 - April 2002 to identify the accuracy and precision of the tests and their usefulness in terms of patient outcomes in the context of the current Australian cervical screening guidelines. Assessment of clinical effectiveness relied on five secondary studies and seven primary studies. Assessment of cost-effectiveness was based on both review of a submitted model and revision of this model on the basis that LBC was no worse than Pap smears in detecting high-grade lesions.

DRAFTING NOTE: