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Title **Multifocal Multichannel Objective Perimetry, November 2002**

Agency **MSAC, Medical Services Advisory Committee**

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Aim

To assess the safety, effectiveness and cost effectiveness of multifocal multichannel objective perimetry (MMOP) and under what circumstances public funding should be supported for the service.

Conclusions and results

Safety: There was a lack of safety data, although risks to subjects should be minimal as the test is noninvasive.

Effectiveness: Limitations associated with the evidence preclude evaluation of the clinical effectiveness of MM0P. Two studies with suboptimal design for determining the effectiveness of a diagnostic test were identified. Both reported sensitivities ranging from 95% to 100% and specificities from 93% to 97%. These are likely to be overestimates since the studies were susceptible to bias due to study design constraints resulting in a failure to meet important validity criteria. In particular, the test and the reference were not performed in a consecutive set of patients, but rather in a group known to have the target disorder and a group of control subjects known not to have the disease. As patient management and clinical outcomes were not addressed in any of the studies, it cannot be determined whether the test would improve patient management or whether it could help to slow the progression of glaucoma or any other disease that results in visual field defects.

Cost effectiveness: There is no reliable, high-quality evidence on the costs or outcomes of MMOP in Australia or elsewhere.

Recommendation

Public funding for MMOP should not be supported in Australia at this time.

Method

MSAC conducted a systematic review of medical literature using the Cochrane Library, MEDLINE, PreMedline, EMBASE, CINAHL, Current Contents, and Biological Abstracts databases from 1966 to 2002 to identify the accuracy and precision of MMOP and its usefulness in terms of patient outcomes. This report adopted the criteria for assessing validity of evidence recommended by the Cochrane Methods Working Group on Systematic Review of Screening and Diagnostic Tests. This assesses evidence against the ideal study design for assessing the accuracy of diagnostic tests defined as follows: Patients in the study should have undergone both the diagnostic test in question and a reference "gold standard" test that would confirm whether or not they have the target disorder.

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