

Title:	Minimally invasive direct coronary artery bypass (MIDCAB) with the aid of tissue stabilisers
Agency:	Medical Services Advisory Committee (MSAC) Commonwealth Department of Health and Ageing GPO Box 9848 Canberra ACT 2601 Australia
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Aim

To assess the safety, effectiveness and cost-effectiveness of minimally invasive direct coronary artery bypass (MIDCAB) for revascularisation of occluded coronary arteries.

Conclusions and results

MIDCAB and coronary artery bypass grafting (CABG) were compared in 4 randomised controlled trials and 14 nonrandomised controlled trials.

Safety

There was some limited evidence that MIDCAB may be associated with less perioperative and postoperative morbidity than for CABG but no differences in mortality rates could be detected between MIDCAB and CABG groups.

Effectiveness

No differences in patency rates could be detected between MIDCAB and CABG, although there may be shorter operating times hospital stays for MIDCAB. However MIDCAB may require more reintervention than CABG.

Cost-effectiveness

There is insufficient evidence to determine whether MIDCAB procedures were less costly than CABG procedures, although shorter operating times and shorter hospital stays are likely to make MIDCAB less costly than CABG.

Recommendation

MSAC recommended that on the strength of evidence pertaining to minimally invasive direct coronary artery bypass, public funding should be supported where perfusion facilities are available for reasons of patient safety.

The Minister for Health and Ageing accepted this recommendation on 17 May 2002.

Methods

MSAC conducted a systematic review of the literature pertaining to minimally invasive direct coronary artery bypass performed on a beating heart via a minimal access incision, compared with coronary artery bypass grafting.