

Title:	Australian audit of endovascular aneurysm repair
Agency:	Medical Services Advisory Committee (MSAC) MDP 106 Commonwealth Department of Health and Ageing GPO Box 9849 Canberra ACT 2601 http://www.msac.gov.au
Reference:	MSAC Endoluminal grafting for abdominal aortic aneurysm 1006 Audit report First printed October 2006 ISBN 1-74186-467-4

Aim:

The audit was established to review the mid to long-term safety and effectiveness of the endovascular graft in Australia and to further assess the safety and effectiveness of the procedure and determine under what circumstances full public funding should be supported for the procedure.

Results and Conclusions:

Safety:

The audit investigated:

- what complications (short and long-term) of the procedure were being experienced;
- by what proportion of patients and;
- what proportion of procedures converted to open repair.

It concluded that some patients with comorbidities appear to be at higher risk of experiencing problems in the longer term, so the need for ongoing and rigorous follow-up of all patients is vital to the ongoing success of the procedure. Sicker patients (eg those considered unfit for open repair), who are most likely to experience post-operative complications, may also be the patients who are unable to attend follow-up in the mid to long-term period.

Effectiveness:

The new data from the audit provided evidence of primary efficacy. Of the 961 patients enrolled in the audit, around 60% survived to five years. Eleven percent of surviving patients were listed as lost to follow-up. 93% of procedures were classified as “technical successes” while mid-term “clinical success” was 85%. However 6% of patients experienced a period of clinical failure before success. Some patients in the clinical success group required further interventions for their aneurysm and 4% had additional endovascular procedures (assisted success) and 1.2% had additional surgical procedures (secondary success) performed to ensure continued exclusion of the aneurysm or graft patency.

Patient data obtained for patients entering long-term follow-up shows 88% clinical success. To date, 16 aneurysms have ruptured post-procedure and 23 patients have had their EVAR converted to open repair. 36 patients had type I endoleak during mid-term follow-up.

Statistical analysis indicates that pre-operative aneurysm diameter is the most significant predictor of the various measures of success.

Cost Effectiveness:

A cost effectiveness analysis was outside the scope of this audit.

Recommendation:

MSAC recommended that on the strength of evidence pertaining to the Australian audit of Endovascular Aneurysm Repair public funding should be supported for this procedure. The Minister for Health and Ageing endorsed this recommendation on 13 June 2007.

Methods:

Operative data was collected for 961 Australian recipients of endovascular aneurysm repair (EVAR) during the period 1 November 1999 to 16 May 2001. This cohort of patients has been followed for over 5 years.