Title: Embolization Therapy for Arteriovenous Malformations or Dural Fistulas: Clinical and Cost-Effectiveness and Guidelines for Use

Date: 06 August 2008

Research question:

1. What is the clinical effectiveness of embolization therapy versus vascular thromboendarterectomy for patients with arteriovenous malformations or dural fistulas?

2. What is the cost-effectiveness of embolization therapy versus vascular thromboendarterectomy for patients with arteriovenous malformations or dural fistulas?

3. What are the guidelines for therapy in patients with arteriovenous malformations or dural fistulas?

Methods:

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 3, 2008), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, EuroScan, international health technology agencies, and a focused Internet search. Results include articles published between 2003 and July 2008, and are limited to English language publications only. Filters were applied to limit the retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, observational studies, economic evaluations and guidelines. Internet links are provided where available.

Results:

HTIS reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews and meta-analyses are presented first. These are followed by economic evaluations, randomized controlled trials (RCTs), observational studies and evidence-based guidelines.

Disclaimer: The Health Technology Inquiry Service (HTIS) is an information service for those involved in planning and providing health care in Canada. HTIS responses are based on a limited literature search and are not comprehensive, systematic reviews. The intent is to provide a list of sources of the best evidence on the topic that CADTH could identify using all reasonable efforts within the time allowed. HTIS responses should be considered along with other types of information and health care considerations. The information included in this response is not intended to replace professional medical advice, nor should it be construed as a recommendation for or against the use of a particular health technology. Readers are also cautioned that a lack of good quality evidence does not necessarily mean a lack of effectiveness particularly in the case of new and emerging health technologies, for which little information can be found, but which may in future prove to be effective. While CADTH has taken care in the preparation of the report to ensure that its contents are accurate, complete and up to date, CADTH does not make any guarantee to that effect. CADTH is not liable for any loss or damages resulting from use of the information in the report.

Copyright: This report contains CADTH copyright material and may contain material in which a third party owns copyright. This report may be used for the purposes of research or private study only. It may not be copied, posted on a web site, redistributed by email or stored on an electronic system without the prior written permission of CADTH or applicable copyright owner.

Links: This report may contain links to other information on available on the websites of third parties on the Internet. CADTH does not have control over the content of such sites. Use of third party sites is governed by the owners’ own terms and conditions.
Three systematic reviews, nine observational studies and one guideline were identified pertaining to the clinical effectiveness of embolization therapy versus surgery for patients with arteriovenous malformations or dural fistulas. No health technology assessments, RCTs or cost information was identified. Additional information that may be of interest has been included in the Appendix.

**Health technology assessments**
No literature identified.

**Systematic reviews and meta-analyses**


**Economic analyses and cost information**
No literature identified.

**Randomized controlled trials**
No literature identified.

**Observational studies**


Guidelines and recommendations


Prepared by:
Kristen Moulton, B.A., Research Assistant
Kelly Farrah, M.L.I.S., Information Specialist
Health Technology Inquiry Service
Email: htis@cadth.ca
Tel: 1-866-898-8439
Appendix – further information:

Clinical trials


Review articles
