Title: Topical Local Anesthetics for Vascular Access in Adults: Clinical Effectiveness and Guidelines for Use

Date: 27 June 2008

Research question:

1. What is the clinical effectiveness of topical local anesthetics for the management of pain during vascular access in adults?

2. What are the guidelines for use of topical local anesthetics for the management of pain during vascular access in adults?

Methods:

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 2, 2008), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, EuroScan, international HTA agencies, and a focused Internet search. Results include articles published between 2003 and June 2008 and are limited to English language publications only. No filters were applied to limit the retrieval by study type. 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 randomized controlled trials, observational studies and evidence-based guidelines.

One systematic review and four randomized controlled trials related to the clinical effectiveness of topical local anesthetics for the management of pain during vascular access in adults were identified from the literature search results. Two evidence based guidelines for use of topical local anesthetics for the management of pain during vascular access in adults were identified.

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.

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No health technology assessments or observational studies were identified. Additional articles of interest are located in the Appendix.

**Health technology assessments**
No literature identified

**Systematic reviews and meta-analyses**


**Randomized controlled trials**


**Observational studies**
No literature identified

**Guidelines and recommendations**


   *Note: see Vascular Access Devices – 4.c.2*

Appendix – further information:

Review articles