Canadian Agency for Drugs and Technologies in Health

HTA
HEALTH TECHNOLOGY INQUIRY SERVICE (HTIS)

Title: Fluoroscopy for the Insertion of Temporary Internal Cardiac Pacemakers: Clinical Effectiveness and Guidelines

Date: 02 June 2008

Research question:

1. Is there evidence supporting the clinical effectiveness of fluoroscopy to guide lead placement for temporary internal cardiac pacemaker insertion procedures in adult patients?

2. What are the guidelines for the use of fluoroscopy to guide lead placement for temporary internal cardiac pacemaker insertion procedures in adult patients?

3. What is the evidence for the safety of temporary internal cardiac pacemaker insertion in post-myocardial infarction patients who have received fibrinolytic therapy?

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 May 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.

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, systematic reviews, meta-analyses, randomized controlled trials, observational studies, or guidelines were identified pertaining to the use of fluoroscopy for temporary internal cardiac pacemaker insertion procedures. One observational study and review article of interest are located in the appendix.

Health technology assessments
No literature identified

Systematic reviews and meta-analyses
No literature identified

Randomized controlled trials
No literature identified

Observational studies
No literature identified

Guidelines and recommendations
No literature identified

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Appendix – further information:

Observational studies

1. Harada Y, Katsume A, Kimata M, Hikosaka T, Yamanaka S, Akashi K, et al. Placement of pacemaker leads via the extrathoracic subclavian vein guided by fluoroscopy and venography in the oblique projection. *Heart Vessels* 2005;20(1):19-22. PubMed: PM15700198

Review articles

1. Tidy C. Inserting temporary pacemakers. In: *PatientPlus: pacemakers and pacing* [website]. Leeds (UK): Egton Medical Information Systems(EMIS); 2007. Available: http://www.patient.co.uk/showdoc/40024493 (accessed 2008 May 30).