TITLE: High Frequency Oscillator for Patients Requiring Ventilation: Clinical Effectiveness and Guidelines for Use

DATE: 30 October 2008

RESEARCH QUESTIONS:

1. What is the clinical effectiveness of high frequency oscillatory ventilation in the treatment of patients with acute respiratory distress syndrome and acute lung injury?

2. What are the guidelines for use of high frequency oscillatory ventilation in the treatment of patients with acute respiratory distress syndrome and acute lung injury?

METHODS:

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 4, 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 October 2008, and are limited to English language publications only. Filters were applied to limit the retrieval to health technology assessments, systematic reviews, meta-analyses, clinical guideline studies, and randomized controlled trials, and observational studies containing safety data. 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, three randomized controlled trials, nine observational studies, and one recommendation were identified regarding the clinical effectiveness and guidelines for use of high frequency oscillatory ventilation in the treatment of patients with acute respiratory distress
syndrome and acute lung injury. No relevant health technology assessments were identified. Additional articles of potential interest are included in the appendix.

Health technology assessments
No literature identified

Systematic reviews and meta-analyses

Randomized controlled trials


Observational studies


**Guidelines and recommendations**


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APPENDIX – FURTHER INFORMATION:

Review articles


