TITLE: High Volume and Low Volume Infusion Pumps in Pediatric Patients Part II: Guidelines and Evidence for Risk

DATE: 24 August 2009

RESEARCH QUESTIONS:

1. What is the evidence for risks or harms associated with use of high volume infusion pumps compared to low volume (syringe pumps) infusion pumps in neonatal and pediatric patients under six years?

2. What are the guidelines for use of intravenous infusion pumps in neonatal and pediatric patients under six years?

METHODS:

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 3, 2009), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, EuroScan, international health technology agencies, and a focused Internet search. The search was limited to English language articles published between 1993 and 2003. No filters were applied to limit retrieval by study type. Internet links were provided, where available. This report is an update to a previous HTIS report (J0313) that included literature between 2004 and August 2009.

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, controlled clinical trials, observational studies, and evidence-based guidelines.

No health technology assessments, systematic reviews, randomized controlled trials, controlled clinical trials, observational studies, or evidence-based guidelines were identified by the literature search. Additional information that may be of interest has been included in the appendix.
Health technology assessments
No literature identified

Systematic reviews and meta-analyses
No literature identified

Randomized controlled trials
No literature identified

Controlled clinical trials
No literature identified

Observational studies
No literature identified

Guidelines and recommendations
No literature identified

PREPARED BY:
Michelle Mujoomdar, BSc, PhD, Research Officer
Michelle Clark, BSc, Research Assistant
Carolyn Spry, MLIS, Information Specialist
Health Technology Inquiry Service
Email: htis@cadth.ca
Tel: 1-866-898-8439
APPENDIX – FURTHER INFORMATION:

Observational studies


Guidelines and recommendations


Available: [http://aappolicy.aappublications.org/cgi/content/full/pediatrics;111/5/1120](http://aappolicy.aappublications.org/cgi/content/full/pediatrics;111/5/1120)

(accessed 2009 Aug 24).