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

DATE: 18 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 2004 and August 2009. No filters were applied to limit retrieval by study type. Internet links were 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, controlled clinical trials, observational studies, and evidence-based guidelines.

One evidence-based guideline was identified pertaining to the use of infusion pumps in the neonatal and pediatric population. No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, controlled clinical trials, or observational studies were 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
No literature identified.

Randomized controlled trials
No literature identified.

Controlled clinical trials
No literature identified.

Observational studies
No literature identified.

Guidelines and recommendations


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APPENDIX – FURTHER INFORMATION:

Observational studies


Review articles


Additional references
