TITLE: Intravenous Administration via Direct Push or Minibags for Antiemetics, Diuretics and Antibiotics: Clinical and Cost-Effectiveness and Guidelines for Use

DATE: 26 August 2008

RESEARCH QUESTION:

1. Is there evidence for differences in the clinical effectiveness of antiemetics, diuretics or antibiotics when administered via intravenous push versus minibags?

2. Is there evidence for increased risk to the patient when antiemetics, diuretics, or antibiotics are administered via intravenous push versus minibags?

3. What is the cost-effectiveness of intravenous administration of medications via direct intravenous push versus minibags?

4. What are the guidelines for the intravenous administration of antiemetics, diuretics, or antibiotics in different hospital settings?

METHODS:

A limited literature search was conducted on key health technology assessment resources, including PubMed, CINAHL, the Cochrane Library (Issue 3, 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 July 2008, and the results were limited to English language publications only. No filters were applied to limit the retrieval by study type for Questions 1-3, but a guideline filter was applied to limit the retrieval for Question 4. 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...
The literature search identified one systematic review, two economic evaluations, seven randomized controlled trials, and three observational studies examining the intravenous administration of antiemetics, diuretics, and antibiotics. Due to the absence of studies examining direct IV push, articles comparing bolus intravenous administration with continuous infusion were also included in the results. No health technology assessments or evidence-based guidelines were identified. Additional articles of potential interest are included in the appendix.

**Health technology assessments**
No literature identified

**Systematic reviews and meta-analyses**


**Economic analyses and cost information**


**Randomized controlled trials**


Observational studies


Guidelines and recommendations
No literature identified

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APPENDIX – FURTHER INFORMATION:

Review articles


*Note: This article was published prior to the search timeframe*


Additional references

