Title: Bispectral Index Monitoring for Sedation in Pediatrics: Clinical Effectiveness

Date: 18 April 2008

Research question:

What is the evidence for the clinical effectiveness of bispectral index monitoring for use in pediatric patients under sedation to assess consciousness?

Methods:

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 1, 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 April 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 (RCTs), observational studies, and evidence-based guidelines.

One health technology assessment, two RCTs and 27 observational studies were identified pertaining to the clinical effectiveness of bispectral index monitoring for use in pediatric patients under sedation. No relevant systematic reviews or evidence based guidelines were found. Additional observational studies and reviews that may be of interest are included in the Appendix.
Health technology assessments


Systematic reviews and meta-analyses

None identified

Randomized controlled trials


Observational studies


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<th>No.</th>
<th>Author(s)</th>
<th>Title</th>
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<td>13.</td>
<td>Shields CH, Styadi-Park G, McCown MY, Creamer KM</td>
<td>Clinical utility of the bispectral index score when compared to the University of Michigan Sedation Scale in assessing the depth of outpatient pediatric sedation.</td>
<td><em>Clin Pediatr (Phila)</em> 2005;44(3):229-36.</td>
<td>2005</td>
<td>PM15821847</td>
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**Guidelines and recommendations**

None identified.

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Appendix – Further information:

Observational studies


Review articles


