TITLE: Fiberoptic Endoscopic Evaluation of Swallowing for Pediatric Patients with Dysphagia: Clinical Effectiveness

DATE: 12 November 2015

RESEARCH QUESTIONS

1. What is the diagnostic accuracy of the fiberoptic endoscopic evaluation of swallowing procedure for pediatric patients with dysphagia?

2. What is the clinical effectiveness of the fiberoptic endoscopic evaluation of swallowing procedure for pediatric patients with dysphagia?

KEY FINDINGS

Three non-randomized studies were identified on the use of fiberoptic endoscopic evaluation of swallowing for pediatric patients with dysphagia; two of the studies addressed the clinical effectiveness of FEES, while one study addressed the diagnostic accuracy of FEES.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2010 and November 2, 2015. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.
SELECTION CRITERIA

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

Table 1: Selection Criteria

<table>
<thead>
<tr>
<th>Population</th>
<th>Pediatric patients 0-18 years with dysphagia (difficulty swallowing)</th>
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<tbody>
<tr>
<td>Intervention</td>
<td>Fiberoptic endoscopic evaluation of swallowing (FEES)</td>
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<tr>
<td>Comparator</td>
<td>Usual practice (may include assessment by a healthcare professional)</td>
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| Outcomes             | Q1: Diagnostic accuracy of swallowing disorder (e.g., sensitivity, specificity, accuracy)  
                        | Q2: Clinical benefit (e.g., shorter time to diagnosis and therefore faster administration of appropriate treatment or care) |
| Study Designs         | Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, and non-randomized studies |

RESULTS

Rapid Response 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 and non-randomized studies.

Three non-randomized studies were identified on the use of fiberoptic endoscopic evaluation of swallowing for pediatric patients with dysphagia. Two of the studies addressed the clinical effectiveness of FEES, while study addressed the diagnostic accuracy of FEES. No health technology assessments, systematic reviews, meta-analyses, or randomized controlled trials were identified.

An additional reference of potential interest is provided in the appendix.

OVERALL SUMMARY OF FINDINGS

Three non-randomized studies\(^1\)\(^-\)\(^3\) were identified on the use of fiberoptic endoscopic evaluation of swallowing (FEES) for pediatric patients with dysphagia. Two studies\(^1\)\(^-\)\(^2\) had conflicting conclusions on the clinical effectiveness of FEES. One study\(^3\) concluded that FEES was a useful management tool in children with dysphagia. Conversely, a second study\(^2\) did not find a significant improvement of long-term feeding status in children with dysphagia evaluated by FEES.

A third study\(^3\) reviewed the diagnostic accuracy of FEES. It argued that FEES was a necessary step when planning therapy and feeding strategies in children with dysphagia. The study’s authors stated that there was a high error rate when children were being clinically assessed, which was corrected using FEES.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies


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APPENDIX – FURTHER INFORMATION:

Non-Randomized Study – Alternate Comparator