TITLE: Enemas for the Treatment of Constipation in the Emergency Department: Clinical Effectiveness and Guidelines

DATE: 23 February 2015

RESEARCH QUESTIONS

1. What is the clinical effectiveness and harms of enemas for patients presenting with constipation and fecal impaction in the emergency department?

2. What are the evidence-based guidelines regarding the use of enemas for patients presenting with constipation and fecal impaction in the emergency department?

KEY FINDINGS

One randomized controlled trial, three non-randomized studies, and one evidence-based guideline were identified regarding the use of enemas for patients presenting with constipation and fecal impaction in the emergency department.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2015, Issue 2), 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 the 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 February 6, 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.

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<thead>
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<th>Table 1: Selection Criteria</th>
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<tr>
<td><strong>Population</strong></td>
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<td><strong>Intervention</strong></td>
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<td><strong>Comparator</strong></td>
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<td><strong>Outcomes</strong></td>
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<td><strong>Guidelines</strong></td>
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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, non-randomized studies, and evidence-based guidelines.

One randomized controlled trial (RCT), three non-randomized studies, and one evidence-based guideline were identified regarding the use of enemas for patients presenting with constipation and fecal impaction in the emergency department (ED). No relevant health technology assessment reports, systematic reviews, or meta-analyses were identified.

Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

One RCT, three non-randomized studies, and one evidence-based guideline were identified regarding the use of enemas for patients presenting with constipation and fecal impaction in the ED. All identified references were relevant to a pediatric population.

The RCT evaluated the comparative clinical effectiveness of enema versus polyethylene glycol (PEG) 3350 for the treatment of fecal impaction in children. This study demonstrated that patients who had received an enema had significantly improved symptoms relative to PEG within three days of administration but that there was no difference between treatment groups on the fifth day post-treatment. The results of one retrospective cohort study of pediatric ED constipation cases showed that children who received an enema were significantly more likely to revisit the ED than those who did not.

Two non-randomized studies examined the clinical effectiveness and safety of the milk and molasses enema. One retrospective chart review of pediatric patients presenting to the ED with constipation or abdominal pain revealed that the majority of patients treated with a milk and molasses enema experienced relief from constipation, and that the success rate was associated with patient age and enema volume. The authors added that the enemas had minimal side
Another study showed that there were no significant differences in patient outcomes between milk and molasses enemas and sodium phosphate enemas for the treatment of pediatric constipation.

In a National Institute for Health and Clinical Excellence (NICE) guideline for the management of pediatric constipation in primary and secondary care, enemas are not recommended for first-line treatment of fecal disimpaction but are listed as an option for cases in which all oral medications have failed. Recent evidence of the similar clinical effectiveness of oral laxatives and enemas for fecal disimpaction that was cited in the guideline update has not altered this recommendation.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials


Non-Randomized Studies


Guidelines and Recommendations

See: Faecal disimpaction, page 7

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APPENDIX – FURTHER INFORMATION:

Systematic Reviews and Meta-analyses – Unclear Setting

PubMed: PM21718570

Non-Randomized Studies – Alternate Comparator

PubMed: PM23658492

Guidelines and Recommendations

Unclear or Alternate Setting

PubMed: PM24345831
See: 7.1 ’kenlambon@bellnet.ca’Which Pharmacologic Treatment Should Be Given for Disimpaction? page 269 Recommendation 32, page 269

PubMed: PM23261064
Summarized at: http://www.guideline.gov/content.aspx?id=43610
See: What Approaches Should Be Considered for Constipation Unresponsive to Initial Approaches?

Unclear Methodology

See: Treatment of Acute Constipation, page 4 Treatment of Chronic Retentive Constipation (Disimpaction), page 4
See: Phosphate enemas (Age >3 yrs), page 3

See: Table 7 – Cleanout in emergency department or inpatient setting, page 7

See: Management, Disimpaction (for severe symptoms)

Additional References

Safety


See: Administration of Disposable Enemas – Danger from Excessive Pressure, pages 15.3-15.4

Case Study

See: Figure 3. Algorithm for Treating Constipation in Cancer Patients in the ED, page 10