

Database of Abstracts of Reviews of Effects (DARE)

Rectal irrigation in the management of functional bowel disorders: a review
 Tod A M, Stringer E, Lavery C, Dean J, Brown J

CRD summary	This review concluded that rectal irrigation may have a role in the management of functional bowel disorders, but further research is needed to confirm this. The findings of this review should be interpreted with caution, given questions about the review methodology and the limitations of the evidence presented.
Authors' objectives	To evaluate the effectiveness of rectal irrigation for the management of functional bowel disorders (FBDs).
Searching	BIOSIS Previews, AMED, CINAHL, MEDLINE and the Web of Knowledge were searched for studies undertaken in the previous 25 years; the search terms were reported.
Study selection	Studies of retrograde colonic irrigation in patients aged 18 years and over, who were diagnosed with FBDs, were eligible for inclusion. FBD included faecal soiling and incontinence, constipation, impacted constipation and obstructive defaecation. The authors did not specify types of eligible outcome measures. The majority of included studies were conducted in acute care settings; the remainder involved rehabilitative care. The studies were mainly non-comparative and assessed the long-term effectiveness of rectal irrigation. One comparative study compared rectal irrigation with conservative management, and another study assessed the effectiveness of different equipment. Most of the studies were carried out in the hospital, but a small number were carried out at home by the patient themselves. The techniques and equipment used varied (further details were reported). In the majority of studies a specialist nurse instructed the patients, while in the remaining studies (where stated) an enterostomal therapist was responsible for providing instruction. Almost half of the studies included patients with neurological colorectal problems; the rest included a variety of symptoms and pathologies relating to obstruction, constipation, and faecal soiling or incontinence. The duration of follow-up ranged from 6 weeks to 56 months, and outcomes varied but included stool volume, patient satisfaction, quality of life, measures of symptom improvement, continuation rate and reasons for discontinuation (further details were reported).

	The authors did not state how the papers were selected for the review, or how many reviewers performed the selection.
Validity assessment	<p>Each study was assessed according to the appraisal framework of Greenhalgh (1997), which included an assessment of the study methods, the suitability of the study design, bias and a justification of the analysis and results.</p> <p>The authors did not state how the validity assessment was performed.</p>
Data extraction	<p>Where available, details of the continuation rate and reasons for discontinuation were extracted; overall findings, and in some cases p-values, were also reported.</p> <p>The authors did not state how the data were extracted for the review, or how many reviewers performed the data extraction.</p>
Methods of synthesis	Differences between the studies in terms of the interventions, patients and outcomes precluded a statistical analysis, so a narrative summary with accompanying data tables was presented.
Results of the review	<p>Nine studies (n=519), including one randomised controlled trial (RCT; n=87), were included in the review. The sample sizes ranged from 14 to 190 participants.</p> <p>Two studies failed to adequately report their data collection methods and only one study (the RCT) reported sufficient details of loss to follow-up.</p> <p>Two earlier studies of pulsed irrigation enhanced evacuation carried out in a health care setting reported generally positive outcomes.</p> <p>In all but one study patients with faecal incontinence or soiling benefited from rectal irrigation. Continuation rates, where reported in five studies, ranged from 40 to 92%.</p> <p>Two studies reported that patients with rectal incontinence benefited more from rectal irrigation than patients with constipation.</p> <p>The only RCT reported improvements in faecal incontinence (p=0.015), bowel function (p=0.0048), general satisfaction (p=0.23), constipation (p=0.0016) and quality of life (p=0.00009), for those patients (n=42) receiving transanal irrigation compared with those receiving conservative bowel management (n=45). However, follow-up was limited to 10 weeks.</p>
Authors' conclusions	Whilst the evidence presented suggests that rectal irrigation may be a successful treatment option for some people, the included studies were limited in number and subject to a number of methodological flaws and limitations. Therefore, further research is required before any recommendations for the wider use of this intervention can be made.

CRD commentary	<p>This review answered a clear research question using a broad range of study designs, but used no clearly defined criteria to assess outcome eligibility. A number of electronic databases were searched for relevant literature, but no specific attempts to locate unpublished material appear to have been made. In addition, all of the included studies were written in English, which raises the possibility of language bias. It is also unclear how studies were selected, their quality assessed and the data extracted, therefore it is difficult to determine the reliability of the methods with regard to minimising reviewer error and bias. A critical appraisal of each study was carried out, but few details of the precise criteria used and the findings of the assessment were reported. However, the authors highlighted several concerns about the methodology of the studies and these informed their recommendations for further research. Given the apparent paucity of comparative studies, the overall quality of the included studies is likely to be limited. Differences between the studies in terms of the interventions, participants, study designs and outcomes also limit the interpretation of the data, and the authors are justified in limiting their findings to a narrative summary. Overall, the findings of this review should be interpreted with caution as advised, given questions about the review methodology and the limitations of the evidence presented.</p>
Implications of the review for practice and research	<p>Practice: The authors stated that rectal irrigation should be used with caution in practice, until further research evaluates its efficacy and safety.</p> <p>Research: The authors stated that further rigorously-conducted RCTs of sufficient size and power are required. These should focus on both clinical and patient-centered outcomes, including quality of life, adverse effects and potential risks of the procedure. Before such trials are carried out, further qualitative research is required to explore why and how rectal irrigation is beneficial to some patients, but not to others, and to determine the role of nurses or enterostomal therapists in teaching, supporting and supervising patients.</p>
Funding	Not stated.
Bibliographic detail	Tod A M, Stringer E, Levery C, Dean J, Brown J. Rectal irrigation in the management of functional bowel disorders: a review. British Journal of Nursing 2007; 16(14): 858-864
Link to Pubmed record	17851346
Subject index terms status	Subject indexing assigned by NLM

Subject index terms	Chronic Disease; Colonic Diseases, Functional /prevention & control / psychology; Constipation /prevention & control /psychology; Enema / adverse effects /methods /nursing; Evidence-Based Medicine; Fecal Incontinence /prevention & control /psychology; Great Britain; Humans; Irrigation /adverse effects /methods /nursing; Nurse's Role; Nursing Assessment; Nursing Evaluation Research; Patient Education as Topic; Qualitative Research; Quality of Life /psychology; Randomized Controlled Trials as Topic; Rectum; Research Design; Social Support; State Medicine; Treatment Outcome
Accession number	12007009434
Database entry date	23 December 2008
Record status	This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:....].

Database of Abstracts of Reviews of Effects (DARE)
Produced by the Centre for Reviews and Dissemination
Copyright © 2008 University of York.

Close window 