Abdominal massage therapy for chronic constipation: a systematic review of controlled clinical trials

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Authors' objectives
To assess the effectiveness of abdominal massage therapy for chronic constipation.

Searching
MEDLINE, EMBASE, CISCOM and the Cochrane Library were searched to June 1997 using the following search terms: massage; abdominal massage; manual therapy; constipation; complementary medicine; alternative medicine; and controlled clinical trials. Experts in the field were contacted for published and unpublished material and the author's own files were scanned. Bibliographies of retrieved studies were reviewed. No language restrictions were applied.

Study selection
Study designs of evaluations included in the review
Controlled trials of abdominal massage conducted against a non-massage control group were included. Trials that compared one form of massage with another were excluded. Actual studies were of controlled cross-over design.

Specific interventions included in the review
Massage including abdominal massage was carried out in the following regimes: nine sessions each of twenty minutes duration; daily for five days per week for seven or twelve weeks; or regularly for one month. Concomitant treatment included a supervised exercise programme. Comparison therapies included no massage, connective tissue manipulation, and laxatives as before the trial.

Participants included in the review
Participants included chronically constipated patients with a transit time in excess of sixty hours, elderly chair bound or bedfast patients with chronic constipation and laxative use, disabled institutionalised adults with severe chronic constipation and healthy male volunteers.

Outcomes assessed in the review
The following outcomes were assessed: total colonic transit times using radiopaque markers; stool frequency; number of days with bowel movements; episodes of faecal incontinence; number of enemas given; stool consistency; gastrointestinal transit time; and patient well-being.

How were decisions on the relevance of primary studies made?
The author does not state how the papers were selected for the review, or how many of the reviewers performed the selection.

Assessment of study quality
Validity was assessed according to the Jadad criteria which include degree of blinding, adequacy of randomisation and withdrawals (see Other Publications of Related Interest no.1). The author does not state how the papers were assessed for validity, or how many of the reviewers performed the validity assessment.

Data extraction
The following data were extracted in a pre-defined standard fashion: author; year of publication; sample characteristics; interventions; outcome variables; and main results. The authors do not state how many reviewers performed the data extraction.
Methods of synthesis
How were the studies combined?
The studies were combined in a narrative review.

How were differences between studies investigated?
Differences between the studies were discussed.

Results of the review
Four cross-over controlled studies (including one randomised cross over study) and one single case study were included (61 patients).

Methodological quality of trials was poor with Jadad scores of either 0 or 1.

Inconsistent results were reported with two trials (41 patients) reporting no statistically significant difference between treatment phases, one single case cross-over study reporting an improvement in stool frequency during the massage phase, and a cross-over trial with 12 patients reporting no change in colonic transit time but significant improvement in the number of days with bowel movement, episodes of faecal incontinence, and number of enemas given.

Authors' conclusions
None of the studies are free from methodological flaws. They are heterogeneous in terms of trial design, patient samples and types of massage used. Nonetheless, the results of these trials collectively imply that massage therapy could be a promising treatment for chronic constipation. Future, more rigorous trials should evaluate its true value.

CRD commentary
This review was clearly written and presented. The aims and inclusion criteria were stated. The search was not restricted by language and included a search for unpublished material. Relevant details of the individual studies were presented in tabular format. Validity was assessed. Given the heterogeneous nature of the studies, a narrative review was appropriate.

Methods used to select primary studies, extract data and assess validity were not described.

Given the poor quality of the primary studies and the small sample sizes caution is advised in considering any conclusions based on this evidence.

Implications of the review for practice and research
Practice: The author states that the published data are not sufficient to give recommendations as to which type of massage (if any) is most efficacious, which dosage regimen should be employed, or which type of patient is most likely to respond.

Research: The author states that abdominal massage should be investigated with more thorough trials in future. Such trials should be randomised, evaluator blinded, conducted against an attention control intervention, and with a third parallel arm composed of an actively treated comparison group (e.g. laxatives).

Bibliographic details
Ernst E. Abdominal massage therapy for chronic constipation: a systematic review of controlled clinical trials. Forschende Komplementarmedizin 1999; 6(3): 149-151

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Other publications of related interest

Indexing Status
Subject indexing assigned by NLM

MeSH
Abdomen; Chronic Disease; Clinical Trials as Topic; Constipation /therapy; Humans; Massage

Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.