

## ABDOMINAL MASSAGE FOR THE TREATMENT OF CHRONIC CONSTIPATION: RESULTS FROM A COCHRANE REVIEW

### Hypothesis / aims of study

Chronic constipation is a condition in which a person has reduced frequency or ease of stool passage from the normal or expected pattern for that individual. The exact prevalence of chronic constipation is unknown, but it is estimated to affect 1 in 5 community-dwelling older adults, resulting in more than 450,000 GP consultations per year in the UK, at an estimated cost of more than £4.5 million per year [1]. The cost to the individual is incalculable; but studies have clearly shown that this unpleasant, and often distressing disorder, negatively impacts on their quality of life [2].

Abdominal massage (AM) has been used by some clinicians and patients to help relieve the symptoms of constipation (e.g. infrequent bowel movements, feeling bloated and uncomfortable) and has seen a revival in its use in recent years. In this systematic review, we sought to determine the effects of AM for the relief of symptoms of chronic constipation in comparison with no treatment or other treatment options.

### Study design, materials and methods

We systematically searched 8 electronic databases (from inception to 30 June 2015) including the Cochrane Inflammatory Bowel Disease Group Trials Register; the Cochrane Complementary Medicine Field Trials Register, Cochrane Library Databases (CDSD, DARE, CENTRAL, HTA), AMED, MEDLINE, EMBASE, CINAHL, and the British Nursing Index. Conference proceedings including Digestive Disease Week, and the United European Gastroenterology Week, were searched to identify studies published in abstract form. We also searched major trials registers for ongoing trials including ClinicalTrials.gov, National Research Register, Current Controlled Trials and WHO ICTRP. In an effort to identify further published, unpublished and ongoing trials, we handsearched the reference lists of relevant articles and contacted academic institutions and other researchers. No language restrictions were applied.

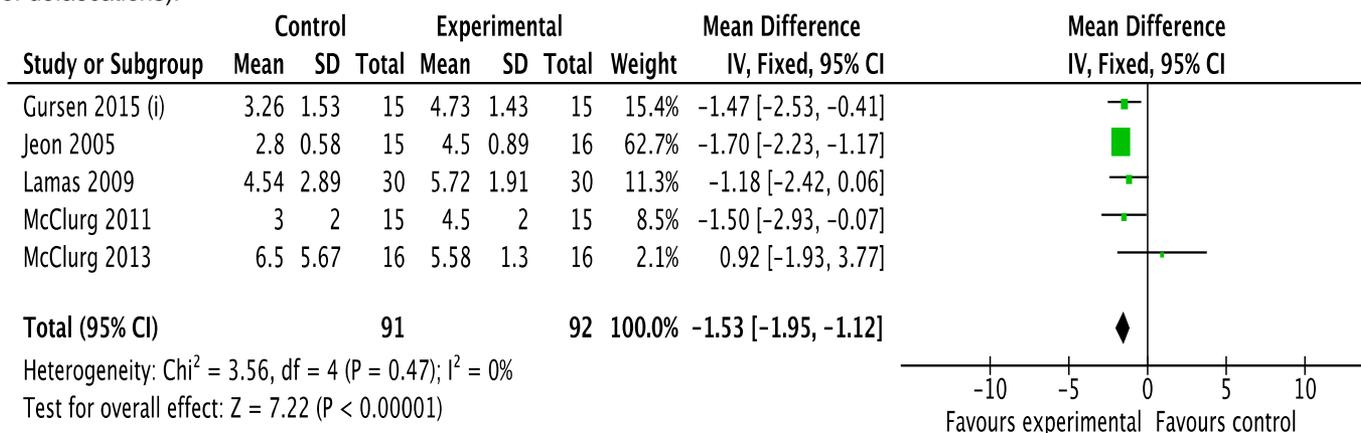
We included randomised controlled trials (RCTs) comparing AM versus no treatment, usual care and those comparing other types of massage, laxative agents, biofeedback, transanal irrigation or any other non-surgical interventions. Outcomes included measures of global or clinical improvement, frequency of defaecation, type of stool, time spent on the toilet, transit time measurements, and quality of life measures. Two review authors independently categorised identified trials according to the selection criteria, documented their methodological quality and extracted the data. Intervention details were reported in accordance with the template for intervention description and replication (TIDieR) checklist [3]. Disagreements were resolved by discussion. Missing data was sought from investigators.

### Results

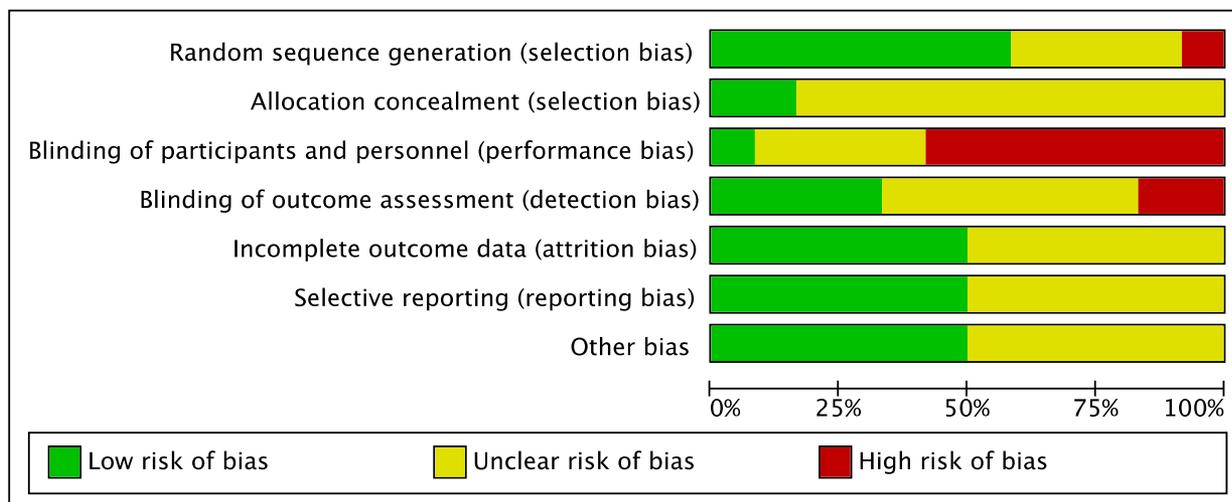
We identified 106 records; screened 54 abstracts and obtained 35 full text papers. Nine trials (12 randomised controlled comparisons) relevant to this review were identified with a total of 427 participants. The patient populations were heterogeneous, as they included individuals with severe physical and mental disabilities, cancer, MS, Parkinson's disease, and those suffering from constipation without comorbid conditions. Sample sizes were small (less than 25 participants per arm) in 7/9 trials. Moreover, the study designs were varied and treatment periods differed across trials (ranged from 5 days to 8 weeks).

Five trials (183 participants) compared AM versus no treatment (or usual care) where AM resulted in clinically and statistically significant benefits to patients' number of defaecations (see Figure 1). The risk of bias of the included studies was generally unclear (Figure 2). The criteria used to assess risk of bias were not reported in sufficient detail, especially details surrounding randomisation, concealment, compliance and tracking of co-interventions.

**Figure 1.** Forest plot comparing abdominal massage versus no treatment or usual care for primary outcome measure (number of defaecations).



**Figure 2.** Risk of bias graph: review authors' judgements about each risk of bias item presented as percentages across all included studies.



#### Interpretation of results

There is some limited evidence of a beneficial effect when AM is compared with no treatment or usual care on the frequency of bowel movement in people diagnosed with chronic constipation.

#### Concluding message

This is the first systematic review of RCTs to examine whether AM is effective in the relief the symptoms of constipation. High quality evidence relating to effectiveness and cost-effectiveness of AM for chronic constipation in the medium and long term is still needed. It would also be beneficial for future research to explore patient perspectives on treatment outcomes for constipation.

#### References

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#### Disclosures

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