
Homeopathy for postoperative ileus: a meta-analysis

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Authors' objectives

To determine whether homeopathic treatment has any greater effect than placebo administration on the restoration of intestinal peristalsis in patients after abdominal or gynaecologic surgery.

Searching

The following electronic databases were searched: MEDLINE, EMBASE, BIOSIS Previews, PsycINFO, CINAHL, Science Citation Index, British Library Stock Alert Service, CISCOM, Sigle, AMED. Search terms are not listed. Relevant journals were handsearched. The systematic review by Kleijnen et al (see Other Publications of Related Interest no.1) was searched. Reference lists of retrieved papers were searched. MEDLINE was searched up to March 1996 but it is not stated when the other databases were searched up to. There were no language restrictions.

Study selection

Study designs of evaluations included in the review

Randomised placebo-controlled trials (RCTs).

Specific interventions included in the review

Homeopathic remedies (Opium, Raphanus sativus, China regia, Arnica montana) in potencies ranging from 5C - 15C. Remedies of <12C potency were looked at separately from remedies of ≥12C potency as a ≥12C potency solution is unlikely to contain even a single molecule of the original starting material. Placebos used in the studies were unmedicated granules (usually lactose) or drops (alcohol diluted in water).

Participants included in the review

People who had undergone abdominal or gynaecologic surgery.

Outcomes assessed in the review

Time to first flatus (defined as the time from the end of the surgical intervention until the first passage of intestinal gas).

How were decisions on the relevance of primary studies made?

The authors do not state how the papers were selected for the review, or how many of the authors performed the selection.

Assessment of study quality

An approach described by Kleijnen et al (see Other Publications of Related Interest no.1) was used to obtain quality scores for each study. Criteria included characteristics of patients, number analysed, randomisation procedure, intervention, double-blinding, measurement of effect and presentation of data. A score of 55 or more was used to indicate studies of higher quality. The authors do not state how the papers were assessed for quality, or how many of the authors performed the quality assessment.

Data extraction

Where possible study authors were asked exactly how outcomes were measured. Mean and standard deviation values for the parameter were extracted for both treatment and control groups, along with study details including patient numbers, patient details, type of surgery, inclusion and exclusion criteria, study design, method of randomisation, concealment of treatment allocation, treatment doses.

Methods of synthesis

How were the studies combined?

A pooled weighted mean difference (fixed-effect model) was calculated with 95% confidence intervals using RevMan software. Meta-analyses were conducted for all included studies, for those in which homeopathic remedies at a potency of <12C were compared with placebo and for those that compared homeopathic remedies at a potency of 12C or above with placebo.

How were differences between studies investigated?

Statistical heterogeneity was not investigated. Sensitivity analyses were performed on studies investigating remedies of <12C potency separately from studies investigating remedies of 12C potency or more. Another sensitivity analysis was performed excluding studies that were below the cut off point for studies of higher methodological quality (a score of <56).

Results of the review

Six RCTs (n=1,076).

All studies: time to first flatus WMD between homeopathy and placebo = -7.4 hours (95% CI -4.0 hours, -10.8 hours), $p < 0.05$. This effect is likely to be clinically relevant.

Excluding studies of low quality (n=676): time to first flatus WMD between homeopathy and placebo = -6.11 hours (95% CI -2.31 hours, -9.91 hours), $p < 0.05$.

Only studies of <12C potency (n=660): time to first flatus WMD between homeopathy and placebo = -6.6 hours (95% CI -2.6 hours, -10.5 hours), $p < 0.05$.

Only studies of 12C potency or more (n=416): time to first flatus WMD between homeopathy and placebo = -3.1 hours (95% CI -7.5 hours, 1.3 hours), not statistically significant.

Authors' conclusions

There is evidence that homeopathic treatment can reduce the duration of ileus after abdominal or gynaecologic surgery. However several caveats preclude a definitive judgement. These results should form the basis of a randomised controlled trial to resolve the issue.

CRD commentary

This is a good review. The research question is clear, the literature search is comprehensive (although it is unlikely that unpublished or grey literature would have been identified), inclusion criteria are clear, quality assessment is undertaken and used in a sensitivity analysis. Statistical pooling of RCTs seems appropriate. More details of the studies included (participants' ages, type of operations and so on) would have been useful. An assessment of statistical heterogeneity would also have been useful. The authors' conclusions do follow from the results presented.

Implications of the review for practice and research

The authors recommend more rigorously designed randomised trials of homeopathic treatment (most likely Opium or Raphanus sativus or both at potencies of <12C) for postoperative ileus.

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Bibliographic details

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Other publications of related interest

1. Kleijnen J, Knipschild P, ter Riet G. Clinical trials of homeopathy. *BMJ* 1991;302:316-23.

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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.