Effect of osteopathic manipulative treatment on incidence of postoperative ileus and hospital length of stay in general surgical patients.

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Source

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Abstract

CONTEXT:

Postoperative ileus is a known complication after abdominal operations, and the clinical efficacy of osteopathic manipulative treatment (OMT) in postoperative surgical patients has seldom been the subject of research.

OBJECTIVE:

To determine whether there is a relationship between postoperative use of OMT and postoperative outcomes in gastrointestinal surgical patients, including time to flatus, clear liquid diet, and bowel movement and postoperative hospital length of stay (LOS).

DESIGN:

A retrospective cohort study.

SETTING:

A 350-bed urban community hospital with an osteopathic residency program in general surgery.

PATIENTS:

Fifty-five patients who underwent a major gastrointestinal operation, who did not die, and who had complete perioperative medical records.

MAIN OUTCOME MEASURES:

We evaluated demographic data; American Society of Anesthesiologists physical status class; preoperative comorbid conditions; postoperative complications; postoperative time to flatus, clear liquid diet, and bowel movement; postoperative hospital LOS; electrolyte abnormalities; and types of narcotics used.

RESULTS:

Of the 55 patients who met the study criteria, 17 had received postoperative OMT and 38 had not. The mean age was 60.3 years in the OMT group and 62.1 years in the non-OMT group (P=.70). The 2 groups were similar in terms of American Society of Anesthesiologists class, number of comorbid conditions and of postoperative complications, presence of electrolyte abnormalities, and narcotic use. The time to bowel movement and to clear liquid diet did not differ significantly between the groups. The mean (standard deviation [SD]) time to flatus was 4.7 (0.4) days in the non-OMT group and 3.1 (0.6) days in the OMT group (P=.035). The mean (SD) postoperative hospital LOS was also reduced significantly with OMT, from 11.5 (1.0) days in the non-OMT group to 6.1 (1.7) days in the OMT group (P=.006).

CONCLUSION:

Osteopathic manipulative treatment applied after a major gastrointestinal operation is associated with decreased time to flatus and decreased postoperative hospital LOS.