- 1. Introduction
- 2. 2. Materials and methods
- 3. 3. Results
- 4. 4. Discussion
- 5. Acknowledgments
- 6. References Show full outline



Tables (1)

1. Table 1



Journal of Bodywork and Movement Therapies





Fascia science and clinical applications - post-surgical visceral massage: animal study

Visceral massage reduces postoperative ileus in a rat model

Author links open overlay panelSusan L.ChapelleRMT^aGeoffrey M.BoveDC, PhD^b Show more

https://doi.org/10.1016/j.jbmt.2012.05.004Get rights and content

Summary

Objective

Abdominal <u>surgery</u> invariably causes a temporary reduction of normal <u>intestinal motility</u>, called <u>postoperative ileus</u>. Postoperative ileus extends <u>hospital stays</u>, increases the <u>costs</u> of hospitalization, and may contribute to the formation of <u>postoperative adhesions</u>. We designed experiments to determine if visceral <u>massage affects postoperative ileus</u> in a rat model.

Material and methods

Forty female Long Evans rats were assigned to 4 groups in a 2 (surgery) × 2 (treatment) <u>factorial design</u>. Twenty rats were subjected to a small intestinal manipulation designed to emulate "running of the bowel." Transabdominal <u>massage</u> was performed upon 10 operated and 10 <u>control</u> rats in the first 12 h following <u>surgery</u>. <u>Ileus</u> was assayed after 24 h using fecal pellet discharge and <u>gastrointestinal transit</u>. Intraperitoneal <u>inflammation</u> was assayed using total intraperitoneal <u>protein</u> and <u>inflammatory cell</u> concentrations.

Results

The surgery consistently caused ileus. Compared to the operated group with no treatment, the operated with <u>treatment group</u> showed increased gastrointestinal transit and reduced time to first fecal pellet discharge. Similar group comparisons revealed that the treatment decreased total intraperitoneal <u>protein</u> and numbers of intraperitoneal inflammatory cells.

Conclusions

In this rat model, visceral massage reduced experimental postoperative ileus. The data suggest that the effect was through the attenuation of <u>inflammation</u>. A similar study could be designed and performed in a <u>hospital setting</u> to assess the <u>potential role</u> of visceral massage as part of the integrated care for postoperative ileus.

- **Previous** article in issue
- Next article in issue

Keywords

Intestinal obstruction Infertility

Postoperative complications

View full text

Copyright © 2012 Elsevier Ltd. All rights reserved.

Recommended articles

The use of abdominal massage to treat chronic constipation

Journal of Bodywork and Movement Therapies, Volume 15, Issue 4, 2011, pp. 436-445 Purchase PDF View details

•

•

Visceral mobilization can lyse and prevent peritoneal adhesions in a rat model

Journal of Bodywork and Movement Therapies, Volume 16, Issue 1, 2012, pp. 76-82 Purchase PDF View details

.

A non-invasive method to evaluate gastrointestinal transit behavior in rat

Journal of Pharmacological and Toxicological Methods, Volume 74, 2015, pp. 1-6 Purchase PDF View details

12Next

Citing articles (10)

- About ScienceDirect .
- Remote access •
- Shopping cart
- Advertise
- Contact and support
- Terms and conditions •
- **Privacy policy** •