OMT FOR IMPROVING RETURN TO BOWEL FUNCTION FOLLOWING CESAREAN SECTION

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INTRODUCTION & BACKGROUND

• Osteopathic Manipulative Treatment (OMT) has historically been used to normalize bowel function in all patients, however limited data exists to prove efficacy with regards to female post-Cesarean return to bowel function.

• OMT has been shown to improve post-operative ileus, poor colonic inertia, and decrease pain in small, single-center studies involving general abdominal surgery patients.

• Unable to find any studies focused on post-Cesarean population.
OBJECTIVES

Primary

• To assess if a single OMT treatment decreases the time to passage of first flatus in post-Cesarean section patients

Secondary

• To assess if a single OMT treatment decreases the time to passage of first bowel movement in post-Cesarean section patients
INCLUSION & EXCLUSION CRITERIA

Inclusion (24 women total):
any women who were undergoing Cesarean section who consented (and whose OB consented)
any woman who had undergone Cesarean section and not met trial endpoints who consented (and whose OB consented)

Exclusion (did not count approached and declined):
any women who did not consent
any women whose OB provider had not signed their consent to participate
any women who had already met trial endpoints prior to consenting
STUDY

• IRB approved pilot study
  • non-blinded randomized control trial with control and treatment groups

• Participants were assigned in alternating fashion A-B-A-B style

• No alterations in care management of clinicians on the part of the researchers including use of medications such as narcotic pain medications, NSAIDs, and stool softeners
METHODS

• Treatment arm (OMT group) received OMT within the first 24 hours following Cesarean section as determined by incision time
  • Single session of 5-10 minutes, provider-directed treatment based on assessment not a standardized treatment protocol

• Results by patient report for time of trial endpoints
  • If patient was discharged ahead of all trial endpoints, patients were called following discharge to assess for endpoints
RESULTS – PRIMARY OUTCOME

Time (hours) to first flatus

- Mean time to flatus in treatment group was 22 hours
- Mean time to flatus in control group was 24 hours
RESULTS – SECONDARY OUTCOME

Time (hours) to first bowel movement

• Mean time to stool in treatment group was 73.7 hours

• Mean time to stool in control group was 66.5 hours
CONCLUSIONS

• There is insufficient evidence to conclude that there is a statistically significant difference between the treatment and control arms due to small sample size for either time to flatus or time to stool

• Despite the lack of significant difference, we did note improvement in average time to flatus in our treatment group

• OMT did not result in any adverse outcomes and patients reported subjective improvement in sensations of low back pain and bloating
KEY POINTS

- In summary: There is insufficient evidence that the use of OMT in women status post Cesarean section reduces time to return to bowel function, however it is not associated with any increase in adverse outcomes and may provide subjective benefit.
AREAS FOR IMPROVEMENT

• Formal collection of patient feedback
  • No objective measures for alternate data, such as subjective pain improvement
• Increase number of patients to increase the power of results
• Provide formal timing cards to help patients recount exact times of flatus and bowel movements
• Compare OMT to sham treatment to minimize contribution of placebo effect
• Expand the study to both Methodist and OSF
• Standardize OMT dosing and technique selection
SPECIAL THANKS TO THE FOLLOWING

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REFERENCES


Questions?
Thank you