

Manual Drainage of the Gallbladder: A Pilot Study

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Introduction:

Manual drainage of the gallbladder has long been practiced by osteopaths. Foundations for Osteopathic Medicine states that the gallbladder can be evaluated and provides treatment strategies, however, there is no research validating this approach. Current mainstream medical options for treatment of gallbladder dysfunction are limited to low-fat diet, medication and surgery.

Objective:

We hypothesize that osteopathic manipulative techniques (OMT) can cause the ejection of bile from the gallbladder.

Methods:

A cohort of patients with risk factors for sub-clinical gallbladder dysfunction were recruited after identification by an electronic medical record query of a single, outpatient, multidisciplinary, musculoskeletal clinic based on age, gender, body mass index and having received OMT 07/01/2017 – 12/31/2020. Gallbladder volume was calculated from standard ultrasound measurements before and after OMT. Ejection fraction (EF) was calculated using these volumes. The OMT protocol included gallbladder drainage techniques, techniques to balance autonomic tone, treatment of spinal segments which provide neurological supply to the gallbladder as well as treatment of areas of greatest restriction. Surveys were completed to compare symptoms before and 1-week post-treatment.

Results:

In 7 of 10 patients, OMT resulted in a gallbladder EF $\geq 21\%$. The mean EF among the 7 responders was 30%. Of the 6 patients that reported gastrointestinal symptoms upon entering the study, 67% reported improvement after treatment.

Conclusion:

Using conventional radiographic evaluation, OMT has been shown to effect gallbladder emptying approximating the established physiologic standard response to a fatty meal test (EF $\geq 27.5\%$). This method provides a basis for planning a larger powered study. The primary limitations of this study were small sample size and use of patients without clinical disease. OMT may provide a well-tolerated option for treatment and prevention of gallbladder dysfunction.