The Efficacy and Impact of Osteopathic Manipulative Treatments in Patients with Lung Disease

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Context

The use of osteopathic manipulative treatment (OMT) in medical disease is a growing field of study, particularly the use of osteopathic treatment as an adjunctive therapy for patients with chronic illness such as COPD, cystic fibrosis, and pneumonias. With emphasis on the relationship between structure and function, a variety of studies investigate the use of osteopathic treatment in lung disease.

Objectives

To review and analyze current evidence in the literature for the use of osteopathic manipulative techniques in patients with pneumonia, COPD, and cystic fibrosis. In addition, to bring forward the uses of such techniques in conjunction with commonly used therapeutic options.

Methods

A comprehensive literature search was conducted of the National Library of Medicine’s MEDLINE/PubMed with the objective of identifying all articles published in English language between January 1980 and May 2018 with “Osteopathic Medicine” and “Chronic Pulmonary Disease” in the title. Combinations of medical subject heading terms including “COPD,” “Cystic Fibrosis” and “Pneumonia” and “Manipulative Techniques” were used. We mainly selected recent publications, but did not exclude any older works that were widely referenced. We also searched the reference lists of all articles identified by this search strategy and selected those we judged to be relevant.

Results

![Graph showing efficacy of OMT in patients with pneumonia](image)

**Fig. 1: Efficacy of OMT in Patients with Pneumonia**

**COPD**

Evaluation of studies in patients with COPD illustrated potential utility of OMT to increase oxygen saturation, improve patient-reported breathing, and increase six-minute walking distance compared to control (p=.04).

**Cystic Fibrosis**

Studies of cystic fibrosis patients showed no significant difference in pulmonary function tests but demonstrated improvement in patient-reported breathing patterns.

Areas of Improvement for Future Research

This analysis also seeks to elucidate areas of improvement for future studies aiming to evaluate the utility of osteopathic manipulation as a treatment modality for various diseases. A major limitation for several studies in this review was the lack of a sham or light touch group, which could help address the amount of improvement in patient-reported symptoms that can be attributed to therapeutic touch alone, rather than osteopathic treatment.

Conclusion

This analysis is intended to illuminate the importance of continued research in the field of osteopathic medicine, particularly as it applies to improving patient symptom severity, quality of life, and disease outcomes in chronic pulmonary conditions.

References