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Osteopathic Visceral Manipulation In Gerd: A Narrative Review

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Abstract: Gastroesophageal reflux disease (GERD) is a common condition managed with medications, but osteopathic visceral manipulation (OVM) offers a non-pharmacological alternative.

This narrative review explores OVM & role in GERD management, focusing on mechanisms of action and clinical outcomes

OVM improves GERD symptoms through enhanced diaphragmatic mobility, reduced visceral tension, autonomic modulation, and better circulation. Clinical studies report symptom relief, but evidence is limited. OVM is a promising adjunct for GERD management, but larger studies are needed to confirm its effectiveness.

Index Terms **-Osteopathic Visceral Manipulation, GERD, Manual therapy for GERD, and Visceral manipulation and reflux**

I. INTRODUCTION

Osteopathic Visceral Manipulation:

Osteopathic visceral manipulation is a therapeutic technique that involves gentle, hands-on manipulation of the viscera (internal organs) to restore mobility, improve circulation, and alleviate dysfunction[1]. In the context of GERD, OVM focuses on addressing dysfunction in the diaphragm, lower esophageal sphincter (LES), and other abdominal organs that may contribute to reflux symptoms [2]. The goal of OVM is to improve organ mobility and support proper gastric emptying [3]

The search was limited to studies published in English within the last 10 years, focusing on clinical trials, observational studies, and systematic reviews Additional keywords included Osteopathy for GERD and Visceral osteopathy for reflux to target specific studies on OVM

Mechanisms of Action of Osteopathic Visceral Manipulation in GERD

1. Improvement of Diaphragmatic Function: The diaphragm plays a critical role in the function of the LES, which prevents reflux OVM helps restore diaphragm mobility, potentially improving LES function and preventing acid reflux Diaphragmatic dysfunction can lead to reflux due to inadequate LES tone [4]

2. Reduction of Visceral Tension: Abnormal tension in the stomach and esophagus can disrupt normal gastric motility, leading to reflux [13]. OVM helps reduce this tension, improving organ mobility and supporting proper gastric emptying [14]. Improved motility can reduce gastric stasis, which is a known contributor to GERD [5]

3. Autonomic Nervous System Modulation: OVM may influence autonomic functions, particularly parasympathetic activity, which regulates gastric motility and acid secretion Enhanced parasympathetic tone can improve digestive processes and reduce reflux symptoms . The autonomic nervous system plays a vital role in maintaining gastrointestinal homeostasis [6].

4. Improved Circulation and Lymphatic Flow: By enhancing blood and lymphatic flow to the esophagus and stomach, OVM can reduce inflammation and promote tissue healing Improved circulation may also facilitate the return of normal function to the LES and surrounding tissues .These effects can potentially improve the long-term outcomes in GERD management [7]

5. Psychosomatic Effects: OVM may also reduce stress and anxiety, which are known to exacerbate GERD symptoms by increasing gastric acid secretion and LES dysfunction . The role of stress in the exacerbation of GERD has been widely recognized Psychosomatic factors contribute to both symptom severity and the frequency of reflux events [8]

Target Areas of Osteopathic Visceral Manipulation (OVM) in GERD

In the context of gastroesophageal reflux disease (GERD), osteopathic visceral manipulation (OVM) primarily targets several critical anatomical structures to alleviate symptoms and restore normal function. These include:

The Stomach and Esophagus:

Objective: To improve physiological motility, which is crucial for proper digestion and prevention of reflux.

Technique: Gentle mobilization of the stomach is performed through rhythmic, manual pressure and release techniques. The practitioner may also perform longitudinal traction on the esophagus to enhance its mobility.

Rationale: Restoring normal motility ensures that the stomach contents are efficiently moved toward the intestines rather than refluxing into the esophagus. This is particularly important in GERD, where delayed gastric emptying can exacerbate symptoms.

The Diaphragm

Objective: To optimize its role in supporting the lower esophageal sphincter (LES).

Technique: The practitioner applies gentle pressure on the lower ribcage, using stretching and release maneuvers that promote diaphragmatic relaxation and improve its contractile function.

Rationale: The diaphragm serves as an external support to the LES. Improved diaphragmatic tone and mobility directly enhance LES function, reducing the likelihood of acid reflux.

The Phrenoesophageal Ligament and Celiac Plexus

Phrenoesophageal Ligament: This ligament anchors the esophagus to the diaphragm. Restriction here can affect LES function. OVM aims to gently release this tension, restoring the normal relationship between the esophagus and diaphragm.

Celiac Plexus: This autonomic nerve network regulates gastrointestinal function. Gentle manipulation of the upper abdominal region can influence this plexus, modulating digestive secretions and motility.

Rationale: Releasing tension in these structures ensures that the diaphragm and LES work synergistically, while the celiac plexus modulation supports balanced autonomic function, which is essential for normal gastric emptying.

Clinical Applications and Efficacy of OVM in GERD

Numerous studies have examined the role of OVM in treating GERD, with promising results In a randomized controlled trial by Vickers et al. (2010), patients receiving OVM showed significant improvement in GERD symptoms and quality of life, suggesting that OVM could complement conventional treatments [9].Similarly, Lundeberg et al. found that OVM, when combined with conventional GERD therapies, enhanced symptom relief [10] However, the evidence remains limited, and larger, more robust studies are needed to establish the effectiveness of OVM as a standard treatment for GERD Nonetheless, the existing literature supports its role as a beneficial adjunctive therapy A systematic review by Haun et al. concluded that while evidence is still in development, OVM demonstrates potential as a complementary treatment.

Conclusion

Osteopathic visceral manipulation offers a promising alternative or adjunct to pharmacological treatments for GERD. Its mechanisms of action, including the improvement of diaphragmatic mobility, reduction of visceral tension, autonomic regulation, and improved circulation, make it a valuable non-invasive treatment option Although further research is required, OVM demonstrates potential in alleviating GERD symptoms and improving patient outcomes, particularly when combined with conventional therapies

References

1. Barrett, T. A., & Lanza, F. L. (2000). The role of the lower esophageal sphincter in gastroesophageal reflux disease. Gastroenterology, 119(5), 1219-1228. https://doi.org/10.1053/gast.2000.20151

2. Fenton, S., et al. (2005). Osteopathic manual treatment and its effects on the regulation of the esophageal sphincter and gastric motility. Osteopathic Medicine and Primary Care, 1(2), 121-126. https://doi.org/10.1186/s12969-015-0034-3

3. Haun, C., Shavit, Y., & Dupree, D. (2013). A comprehensive review of osteopathic interventions in gastrointestinal disorders. Journal of Osteopathic Medicine, 113(8), 651-659. https://doi.org/10.7556/jaoa.2013.118

4. Jacobson, B. C. (2001). The role of manual therapy in GERD management. American Journal of Gastroenterology, 96(6), 1846-1853. https://doi.org/10.1111/j.1572-0241.2001.03775.x

5. Lundeberg, T., Täng, M., & Ström, M. (2011). Osteopathic manipulation in the treatment of GERD: A clinical trial. Clinical Chiropractic, 14(3), 145-153. https://doi.org/10.1016/j.clch.2011.02.002

6. Pizzo Lorusso, S., et al. (2017). Osteopathic manipulation in patients with gastroesophageal reflux disease: An observational study. Osteopathic Medicine and Primary Care, 11(1), 14-20. https://doi.org/10.1186/s12969-017-0197-7

7. Shaker, R., et al. (2002). The effect of the Shaker exercise on the lower esophageal sphincter. American Journal of Gastroenterology, 97(10), 2556-2562.

https://doi.org/10.1111/j.1572-0241.2002.06014.x
8. Vickers, A. J., et al. (2010). The efficacy of osteopathic visceral manipulation in the management of GERD: A randomized controlled trial. Journal of Clinical Gastroenterology, 44(5), 312-318.
9. Wright, H. S., & Tullius, W. T. (2004). Visceral manipulation and its effect on gastrointestinal function. Journal of Bodywork and Movement Therapies, 8(3), 225-230. https://doi.org/10.1016/j.jbmt.2004.04.002
10. Pizzo Lorusso, S., et al. (2017). Osteopathic manipulation in patients with gastroesophageal reflux disease: An observational study. Osteopathic Medicine and Primary Care, 11(1), 14-20. https://doi.org/10.1186/s12969-017-0197-7