Osteopathic Insight in Postpartum Chest Pain: First Rib Somatic Dysfunction Unmasked

Athena Reich (OMS-II), Eden Mohabber (OMS-II), Dr. William Silverman, DO (Family Physician, Board-certified in OMT)

American College of Osteopathic Internists

Background

Postpartum patients frequently present with chest or shoulder pain, triggering workups for cardiac emergencies such as MI (myocardial infarction) or PE (pulmonary embolism). However, musculoskeletal causes, including rib dysfunctions related to breastfeeding posture and postpartum biomechanics, are often overlooked despite high prevalence.

OMT (Osteopathic Manipulative Treatment) provides a hands-on diagnostic and therapeutic tool uniquely suited to uncover somatic dysfunctions that evade conventional imaging and lab work.

Summary and Osteopathic Evaluation

A postpartum breastfeeding mother developed acute right-sided shoulder and chest pain and contacted the treating obstetrician who advised to go to the emergency department (ED) due to a concern for MI. The patient underwent a comprehensive emergency evaluation, including electrocardiogram (ECG), chest imaging, stress test, and cardiac catheterization, all of which were reported as unremarkable. The patient's debilitating chest and shoulder pain persisted without a clear diagnosis.

An osteopathic structural examination provided the critical insight: a somatic dysfunction of the right first rib was identified as the pain's true source. This rib dysfunction was effectively treated with a first rib Still Technique followed by gentle osteopathic manipulative treatment (OMT) to restore normal biomechanical function. The patient experienced immediate and lasting relief of her chest pain after OMT.

Clinical Significance

This case demonstrates:

- The osteopathic tenet that "structure and function are reciprocally interrelated."
- The importance of structural diagnosis in postpartum chest pain with normal imaging.
- How biomechanical strain from breastfeeding (forward posture, rib elevation) can cause first rib dysfunction mimicking cardiac symptoms.

Figure 1: Breastfeeding mother using the cradle hold from Breastfeeding Basics | WIC Breastfeeding. (2019). Usda.gov.

Literature Context

- Over 90% of breastfeeding women report musculoskeletal pain postpartum (Prasanna & Tamizhmani, 2018).
- Rib somatic dysfunction is common in osteopathic clinics and underrecognized in general postpartum care (Baltazar et al., 2020).
- Emergency departments often pursue cardiac etiologies first; musculoskeletal pain is a frequent discharge diagnosis after inconclusive testing (Pulvino et al., 2023).

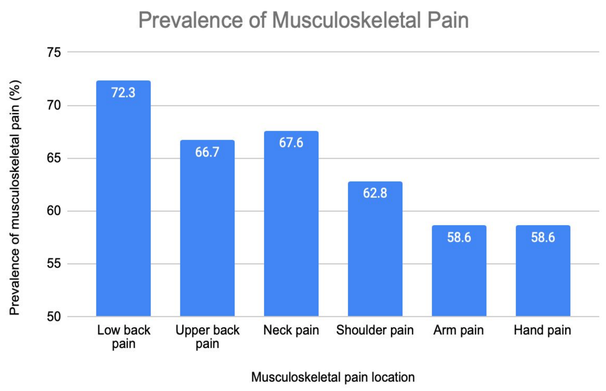
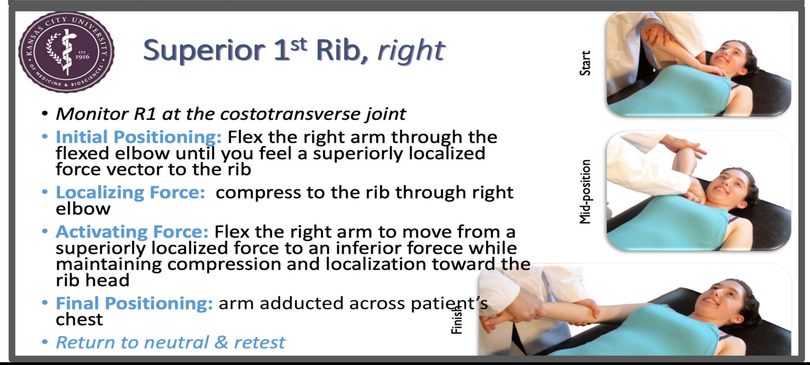


Table 1: *Prevalence of musculoskeletal pain by body region in breastfeeding mothers (example from an Indian cohort). Neck, shoulder, and upper back pain were reported most frequently (Alazmi & Maha Fahad Algabbani, 2023). Nearly all postpartum women experience some musculoskeletal pain, underscoring the high baseline prevalence of musculoskeletal causes for chest/back symptoms. (Axis truncated to show difference)*

Conclusion

This case underscores the value of osteopathic diagnosis and hands-on examination when conventional diagnostics fail to identify the source of pain. It vividly illustrates core osteopathic principles—namely, that the body is a unit and that structure and function are reciprocally related—which can support emergency room evaluations of postpartum patients in pain. The dramatic resolution of cardiac-like symptoms through correction of a rib dysfunction highlights how addressing structural issues can restore function and relieve symptoms (Baltazar et al., 2020). It also calls attention to the need for greater awareness of musculoskeletal complications related to breastfeeding posture and postpartum biomechanical strain—conditions that may mimic serious pathology yet are effectively treatable with OMT (Gustowski et al., 2024).

Figure 2: Still Technique for Rib Somatic Dysfunction as presented by Dr. Danto (D.O.) from the Kansas City University of Medicine & Biosciences.



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