

PREGNANT AND POSTPARTUM MOVEMENT THEORY

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Notes

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PREGNANT AND POSTPARTUM MOVEMENT THEORY

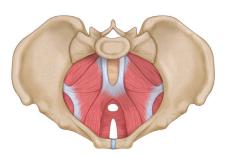
Part 1 Rib Cage Position and Movement

Common Pregnancy Issues

Diastasis Recti

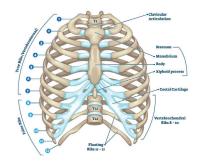


Pelvic Floor Issues



- Incontinence
- Prolapse
- Tension
- Other musculoskeletal issues, such as back and hip pain or plantar fasciitis.

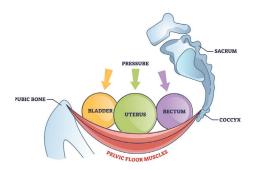
Pregnancy Rib Cage Spreading



- The rib cage and pelvis both spread during pregnancy.
- Addressing rib cage width and mobility:
 - · Increases abdominal recruitment



Decreases pelvic floor pressure



- As the rib cage spreads, it:
 - Changes the length of the intercostal muscles



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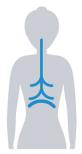
• Flattens the diaphragm from its dome-like shape



• Promotes a shallow breathing pattern



Shallow





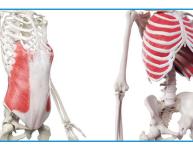
- Can result in increased symptoms of neck and shoulder tension as well as thoracic outlet syndrome
- The psoas and diaphragm work more for postural support due to decreased stability from abdominal muscles
 - Increases psoas tension
 - Further contributes to flattening of the diaphragm, affects the diaphragm's role with breathing, and further contributes to a shallow breathing pattern

Assessing the Infrasternal Angle

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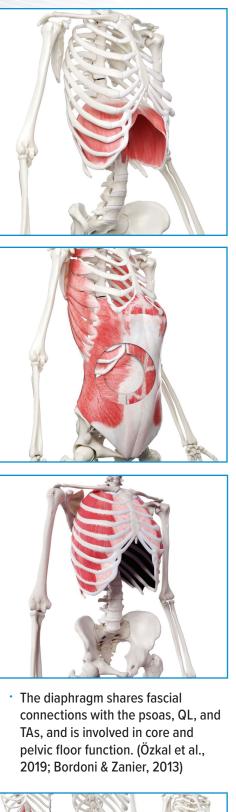
- One way to check the amount of rib cage spread is to look at the infrasternal angle (ISA).
 - Assess for narrow versus wide
- Intercostals breathing check:
 - How far do your ribs move out when you do a big inhale, and how far do they move in when you exhale?
- External obliques versus intercostals



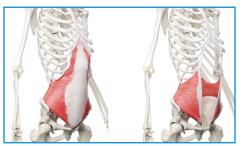
- Why focus so much on rib cage mobility?
- Decreased intercostal strength increases the demand on the external obliques (EOs) for a forced exhale.
- Dominant EOs change the amount of pressure placed down on the pelvic floor.
- For anyone with excessive pelvic floor pressure (leaking, prolapse, tension), you'll want to increase firing of the intercostals and downregulate the EOs.
- Rib cage mobility is not only important for pressure regulation, but it's also key for diastasis recti healing.
- Diaphragm function
 - The diaphragm is a major player in the stabilization of our trunk. It acts as a postural support muscle as well as helping with pressure generation.







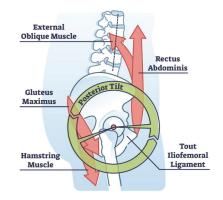
 If the abdominals are weak (particularly the stabilizers), then the diaphragm will work more for postural support.



- If it has to contract for postural support, that brings it down and flattens it out rather than letting it stay up in its dome-like shape. (Boynton et al., 1991; Cassart et al., 1997)
- Getting the diaphragm back into a dome-like shape by working on good, 360 degree, deep breathing and improving the resting position of the rib cage positively influences most areas of the body.
- Increased psoas tension
 - The psoas compensates for decreased abdominal muscles.

High Hinge Point

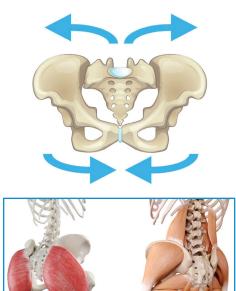
- An increased curve at the T12-L1 junction due to the psoas and posterior diaphragm working more for postural support.
- Is often accompanied with flattening of the lumbar spine, and glute clenching and tucking.



 Changes to the lumbar curve can make the lumbar spine more vulnerable to injury.

Compression = Compensation = Excessive Load

 Posterior pelvic floor tension and lack of sacral nutation (i.e., being stuck in inlet ER) increases compensation with lower lumbar flexion.



 If you can't get nutation and glute and deep hip rotator lengthening, your lumbar spine will have to flex more for movement.



 A high hinge point and excessive extension in the upper lumbar equals greater flexion compensation at the lower lumbar.

Goal From Our First Lesson

- Check the ISA, and apply the differences for narrow versus wide.
- Increase intercostal strength.
- Improve rib cage and thoracic spine mobility.
- Improve the diaphragm's resting position and excursion.
- Decrease psoas tension to improve the lumbar spinal curve.

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