



OMT in the Pregnant Patient

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Overview

- Osteopathic considerations
- Common pregnancy symptoms
- Physiological and biomechanical factors
- Somatic dysfunction
- Special considerations of the pregnant patient
- Osteopathic evaluation and treatment



Osteopathic Considerations

- The body is a unit
- Interrelationship between structure and function
- The role of the physicians is to enhance the body's ability to heal itself
- Restoration of the body's maximal functional capacity enhances the level of wellness and assists in recovery from injury and disease.



Common Pregnancy Symptoms

- Headache
- Nasal congestion
- Nausea/vomiting/Indigestion
- Dyspnea
- Back Pain
- Pelvic Pain
- Constipation
- Edema



Physiological and Biomechanical Factors

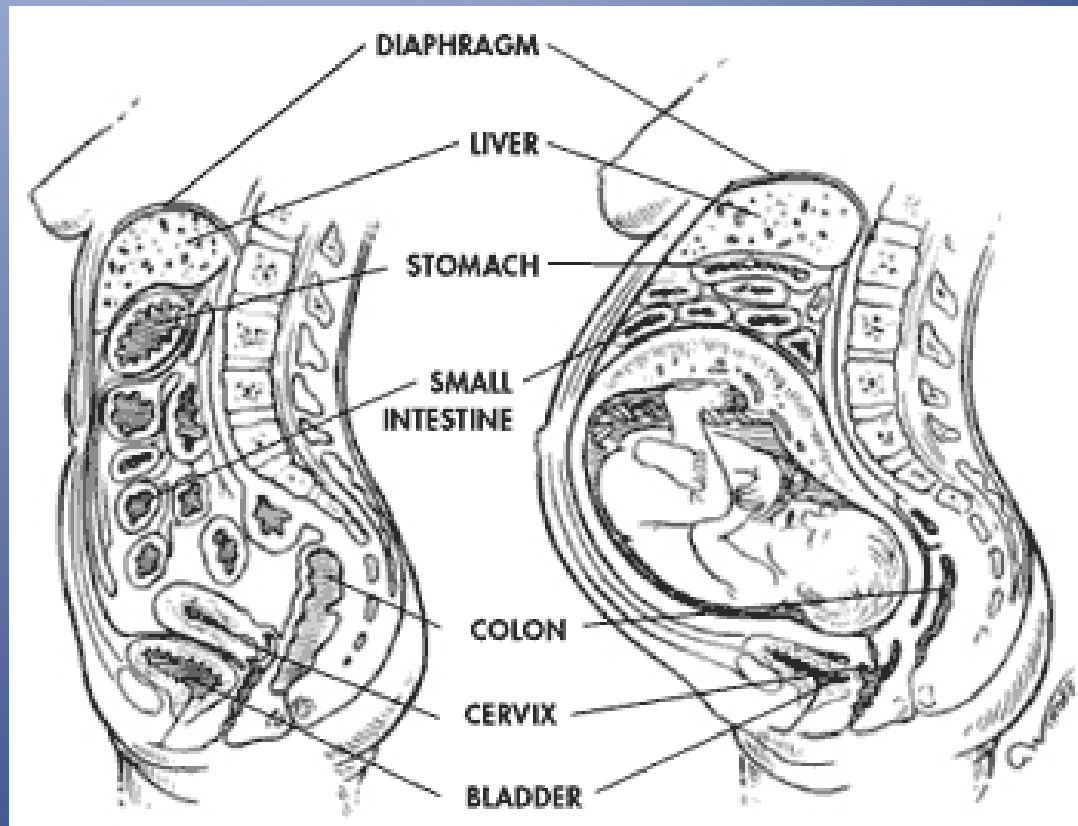
- **Hormonal influence**
 - hCG, progesterone, estrogen, aldosterone, cortisol, relaxin, oxytocin
- Increased cardiac output
- Increased blood volume
- Increased blood to lining of airways
- Decreased CO₂ in blood
- Increased respiratory rate and decreased lung expansion
- Increased filtering by the kidneys



Physiological and Biomechanical Factors

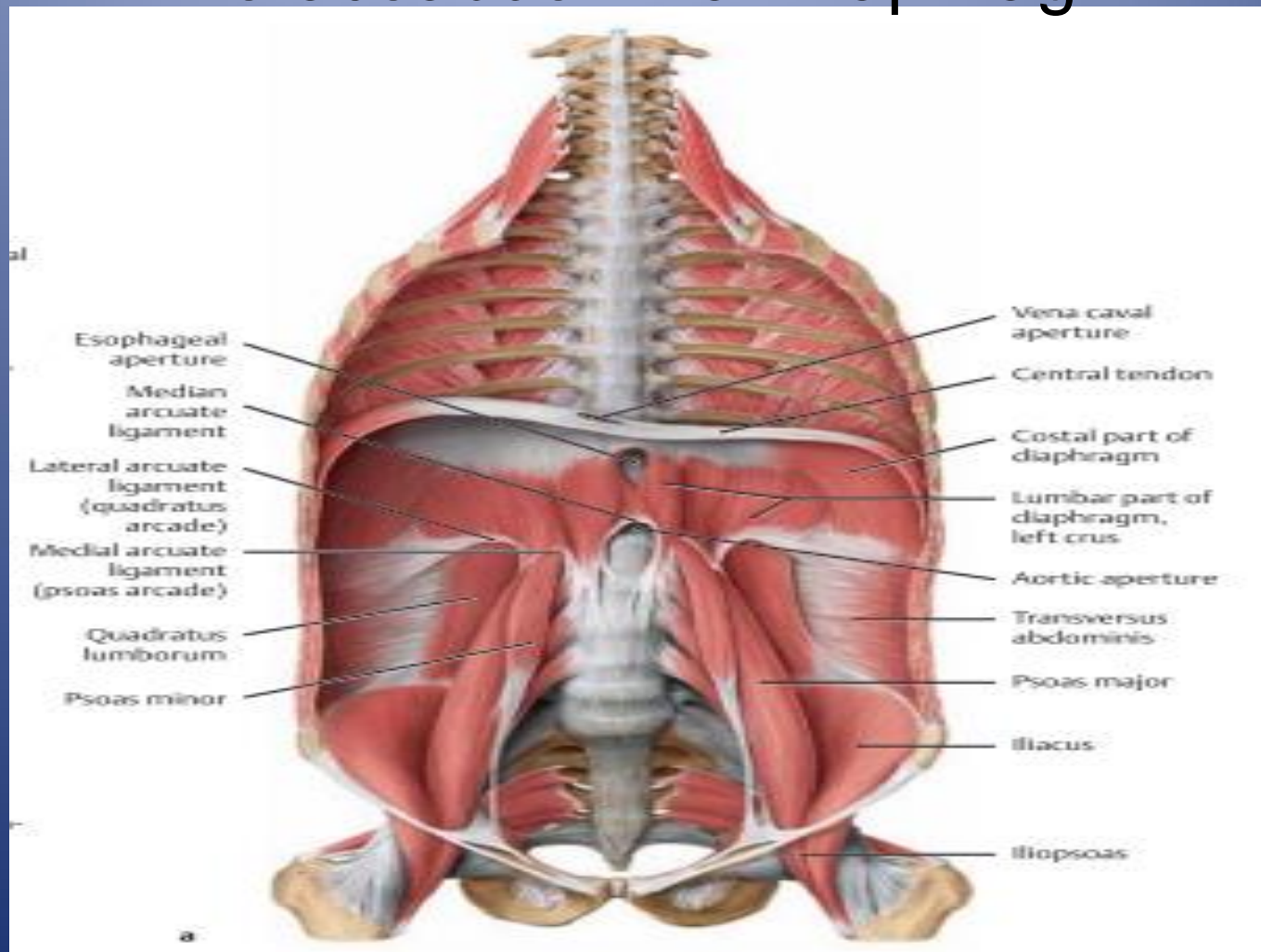
- Smooth muscle relaxation
- Breast enlargement and tenderness
- Uterine enlargement and protruding abdomen
- Decreased blood flow from LE and pelvis
- Increased gastric emptying time and water absorption, decreased sphincter tone and digestive tract motility
- Loosening and increased flexibility of joints and ligaments

Physiological and Biomechanical Factors



Physiological and Biomechanical Factors

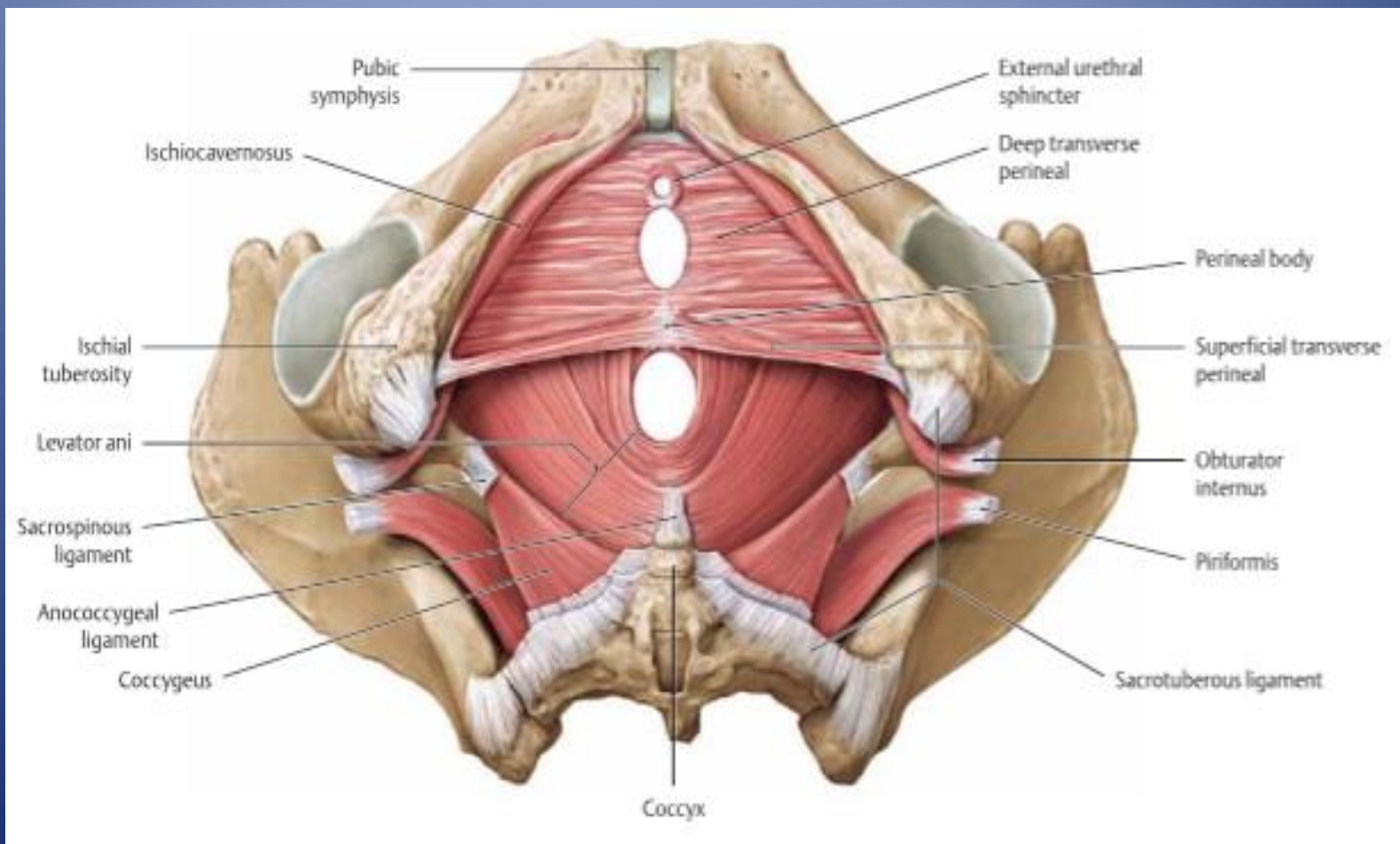
Thoracoabdominal Diaphragm



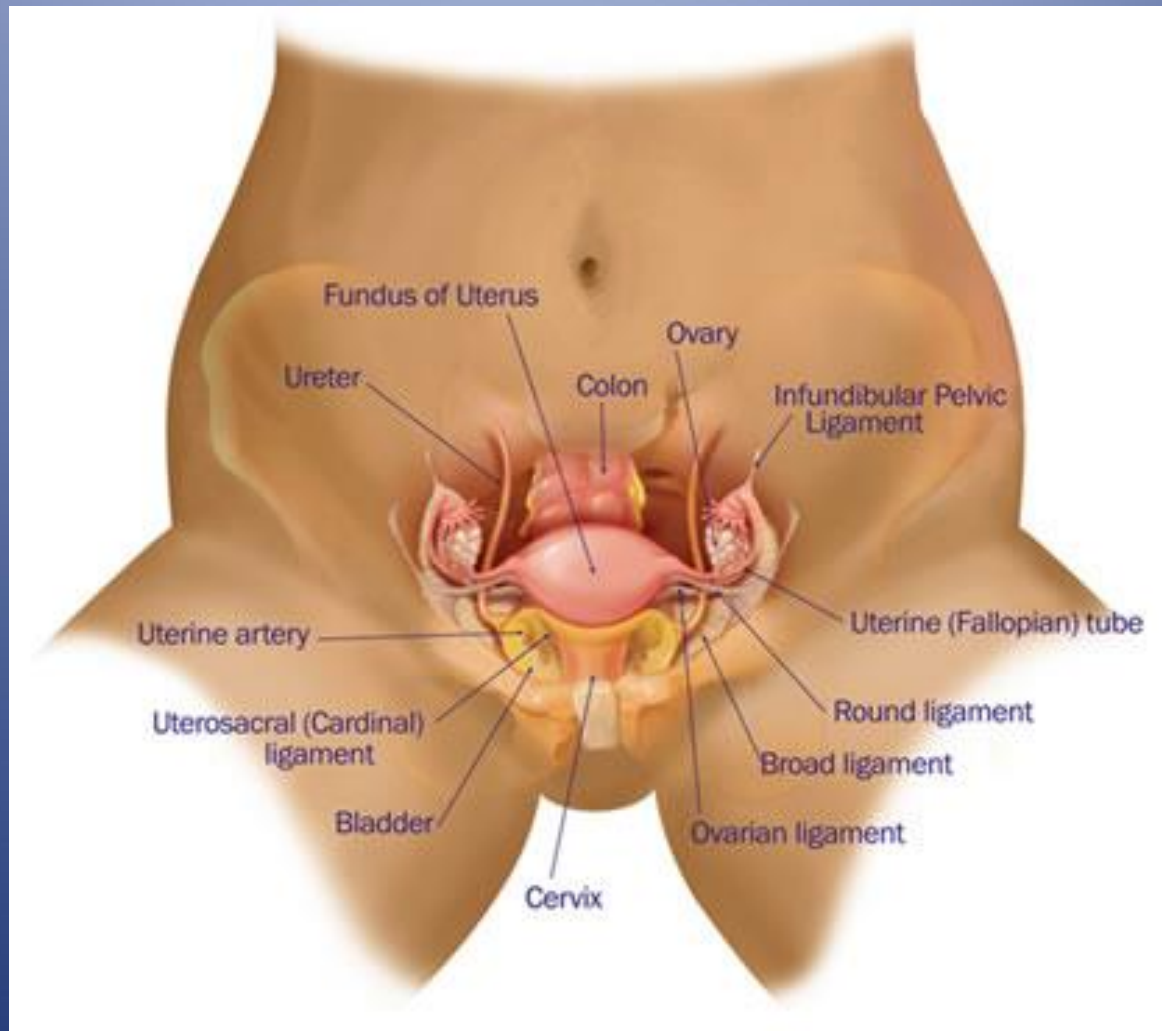


Physiological and Biomechanical Factors

Pelvic Diaphragm



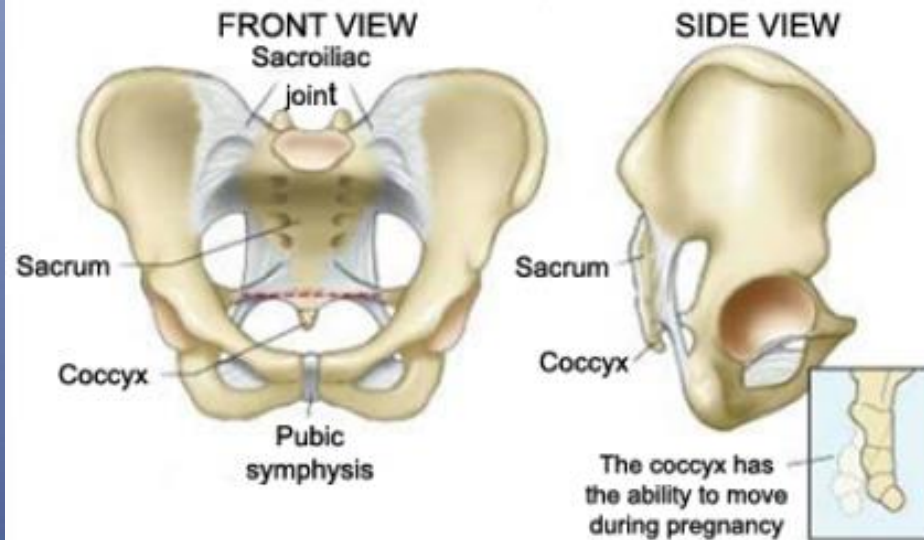
Physiological and Biomechanical Factors



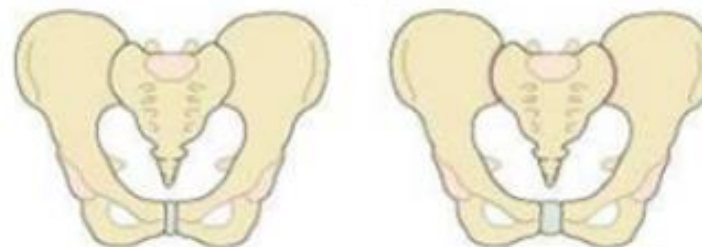


Physiological and Biomechanical Factors

Pelvis & Ligaments



PELVIC BONES



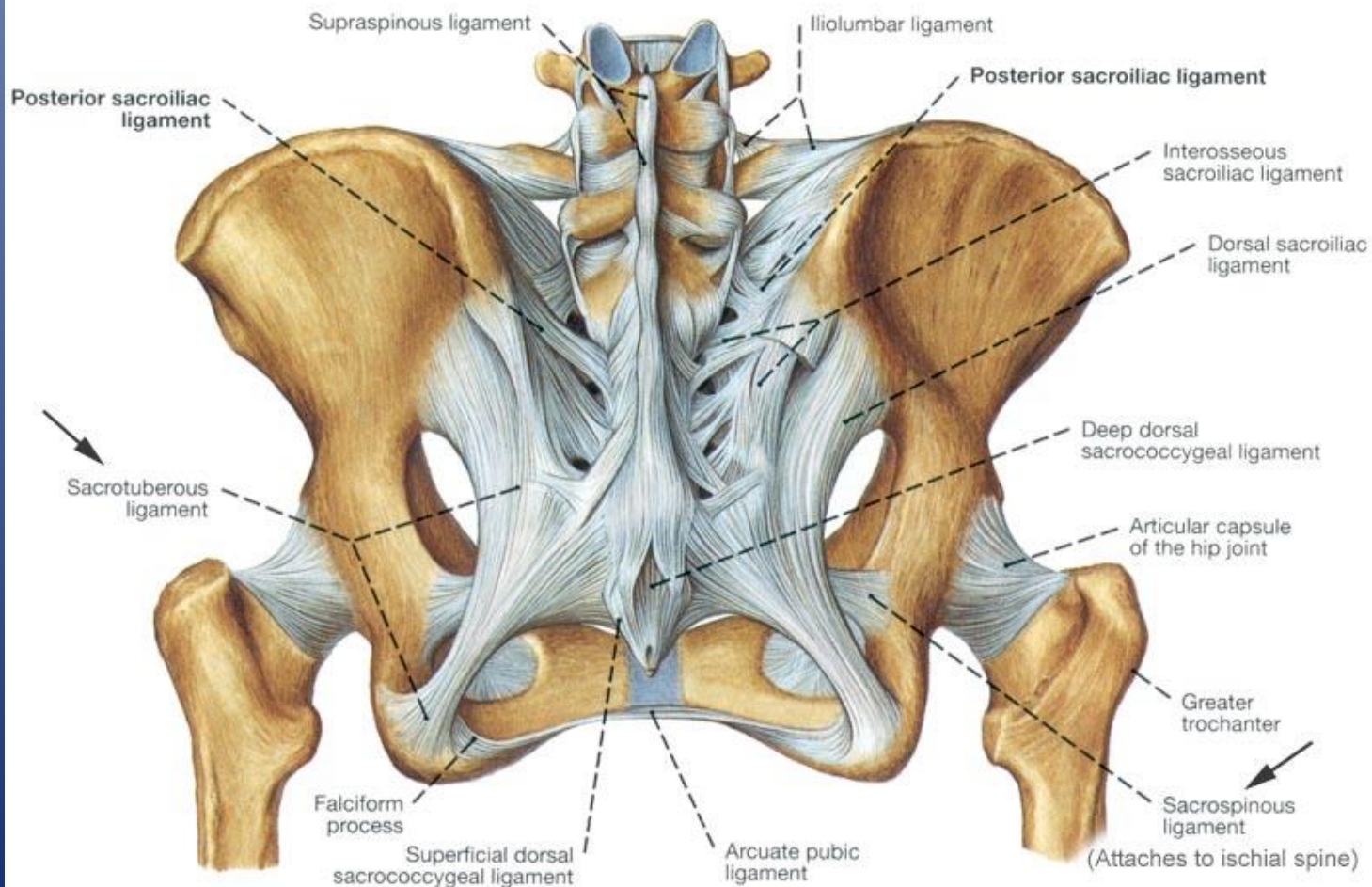
NORMAL

END OF PREGNANCY

The pubic symphysis and sacroiliac joints have increased in diameter

Physiological and Biomechanical Factors

Pelvis and Ligaments, Rear View, Female





Common Pregnancy Symptoms

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Gynecologic Viscerosomatic Reflexes

- Parasympathetics
 - Increased tone = uterine relaxation and cervical constriction
 - Vagus n., pelvic splanchnic n.
 - C0-C2, S2-S4 colon
 - S2-S4 female urogenital tract
- Sympathetics
 - Increased tone = uterine constriction, cervical relaxation
 - T9-L2 uterus, kidneys, ureters, bladder, colon
 - T10-T11 ovaries
 - T10-L2 fallopian tubes



Somatic Dysfunction

- Postural changes
- Cranial strains
- Cervical dysfunctions
- Rib dysfunctions
- Diaphragm Restrictions (thoracic and pelvic)
- Thoracolumbar dysfunctions
- Innominate dysfunctions
- Pubic shears
- Sacral dysfunctions
- Dependent Edema
- Viscerosomatics
- TART



Considerations of the Pregnant Patient

- **H&P first. Rule out any red flags.**
- The pregnant pt. may not be able to lie prone comfortably.
- The pregnant pt. may not be able to lie flat in the supine position.
- The pregnant pt. may not be able to lie in the lateral recumbent position on their right side.
- Treat the pt. in the position of comfort.



Indications

- Somatic dysfunction
- Chronic structural conditions prior to pregnancy
- Pregnancy associated conditions in which OMT can be used as and adjunct
- After trauma, organic causes, unexplained conditions and emergent issues are evaluated/ruled out.



Pearls of Examining the Pregnant Patient

- Monitor gait
 - wider stance, external rotation of hips, more contact with external border of foot, more weight bearing on hind foot – tensions pull pubis apart
- Spinal A/P curves
- Evaluate for symmetry of bilateral landmarks
- Side bending and rotation pattern
- Assess for uterine wall and membranous tensions
- Evaluate uterosacral ligaments



Pearls of Examining the Pregnant Patient

- Assess the transition areas –OA, TL, LS (most stressed)
- TART
- Evaluate cervicothoracic inlet, ribs, diaphragm
- Palpate the sacrum, CRI, motion
- Evaluate for anterior counterstrain points, innominate and pubic dysfunctions



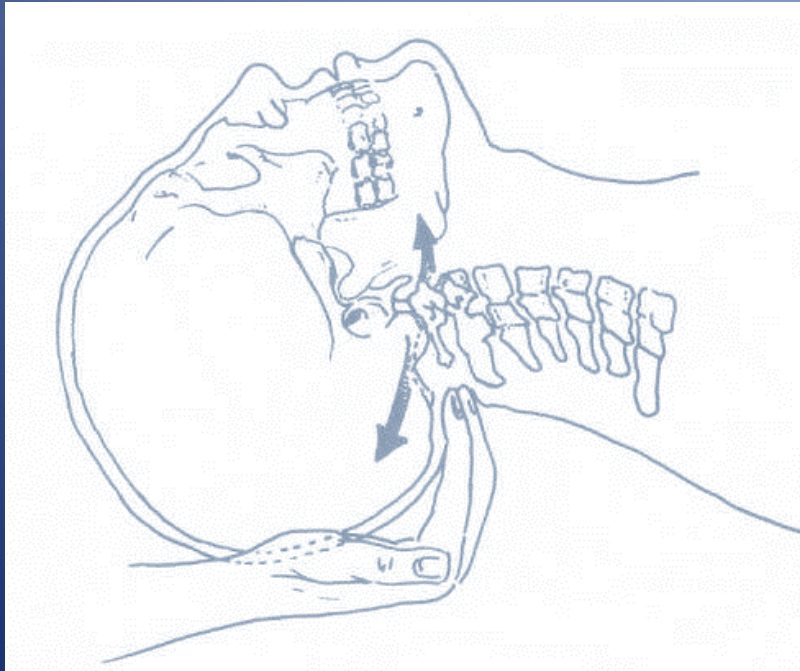
Review of Common Pregnancy Symptoms

- Headache
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OMT

Headaches



Occipital Release

- Pt. supine w/ Dr. at table head
- Dr. holds occiput in palms with fingertips inferior to the inion.
- Fingers are at a 90 degree angle with tips pressing in suboccipital muscles until a release is appreciated.

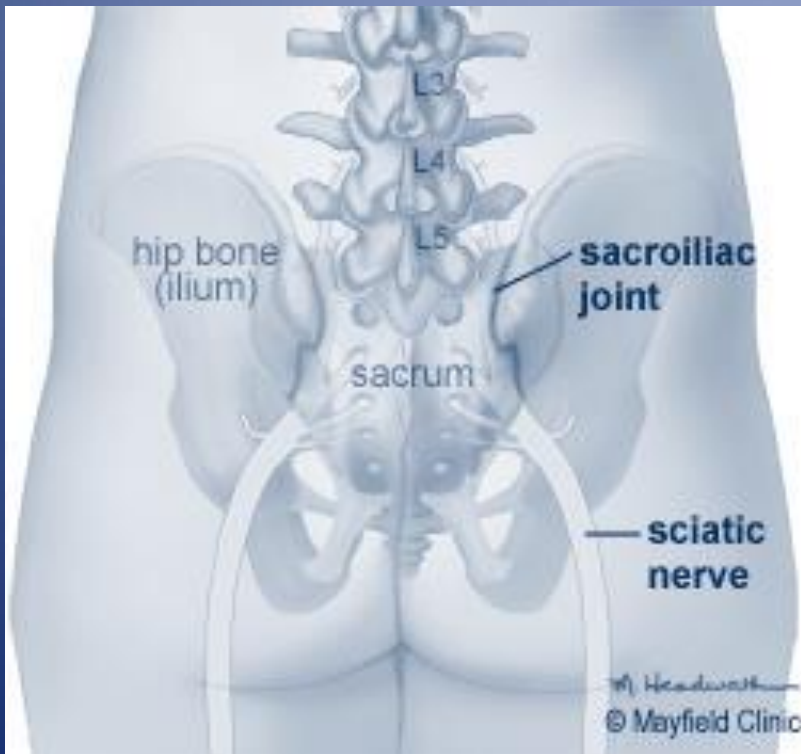


OMT

Headaches

Sacral-Sternal Release

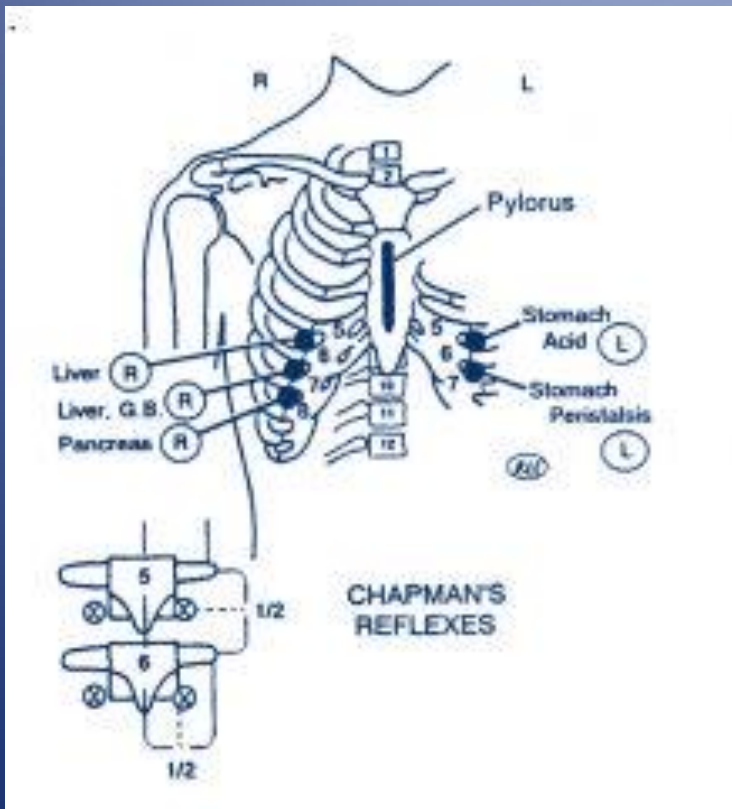
- Pt. supine or in lateral recumbent
- Dr. places one hand on the sacrum and the other hand on the sternum
- Dr. moves fascia to assess and treat restrictions.





OMT

Nausea/Vomiting/GERD



Chapman's Points

- Pt. in position of comfort
- Dr. palpates for tender Chapman points
- Dr uses either thumb or index finger to apply rotatory pressure into the tender point for 10-30 sec.

OMT

Nausea/Vomiting/GERD



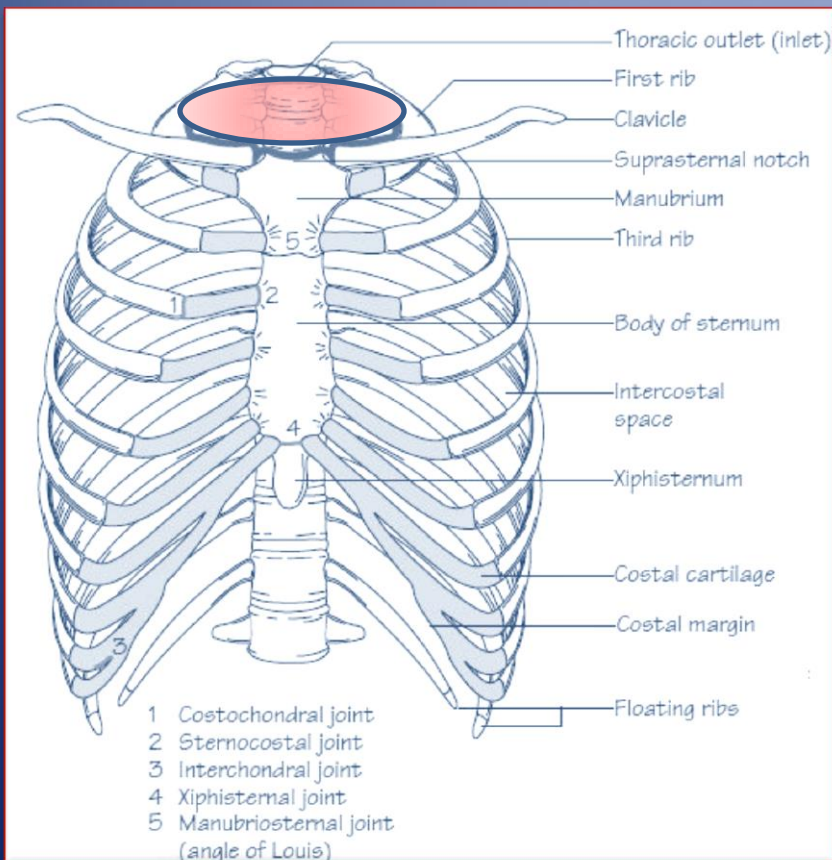
Subcostal Visceral Release

- Pt. lateral recumbent with Dr. standing behind pt.
- One hand contacting subcostally and the other over the lower rib cage.
- Dr. alternates hand movements and moves fascia to assess and treat restrictions.



OMT

Dyspnea



Thoracic Inlet Release

- Pt. supine w/ Dr. at head of table.
- Dr. hands are surrounding the inlet inferior to clavicles, monitoring for fascia tightness.
- Dr. moves fascia to assess and treat restrictions.

OMT

Dyspnea



Doming the Diaphragm

- Pt. is supine
- Dr. grasps the lower aspects of the pt's rib cage. Thumbs and thenar eminences are just below costal margins.
- Pt. inhales deeply while Dr. follows, exaggerating diaphragm and rib cage motion to treat restrictions.



OMT

Back Pain

Frog Leg Kick

- Pt. supine w/ Dr. at the foot end of the bed.
- Pt. knees are flexed and externally rotated. Dr's hand is on the sacral base applying a caudal traction.
- Pt. kicks both legs quickly and forcefully to straighten legs.

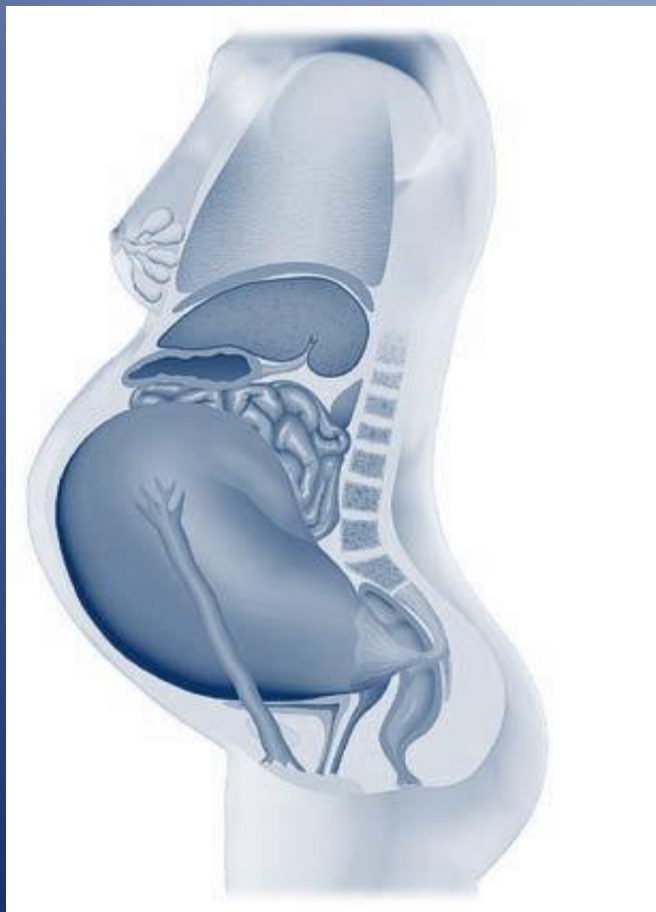
Myofascial Release (coccyx)

- Pt. sitting w/ Dr. behind
- Dr. palpates coccyx with one hand while inducing lateral sidebending of the spine. If coccyx does not move to the same side as the shoulders, + restriction.
- Use sidebending to treat coccyx restrictions with MFR.



OMT

Pelvic Pain



Uterine Lift

- Pt. sitting, supine or standing and Dr. at side.
- Dr. places one hand under the uterus applying a gentle upward lift.
- The pt. moves and the Dr. assess for tension.
- Dr. can move fascia to aid release.
-



OMT

Pelvic Pain

Balancing

- Pt. supine and Dr. at side.
- Dr. places one hand over inguinal region and one hand over the 12th rib/ arcuate ligaments.
- Disengage by compressing the tissues.
- Exaggerate by taking the tissue into the direction of injury (dysfunction).
- Balance tissue for release.

Still Technique (pubis)

- Pt. supine w/ Dr. at side.
- Pt. bends leg on dysfunctional side, other leg straight.
- Dr. abducts pt's hip while compressing towards the pubic symphysis and then externally circumducts the hip.
- Circumduction continues until leg is back on the table



OMT

Constipation



Ischial Tuberosity Spread

- Pt. is in knee chest position.
- Dr. stands at the foot end of the table and internally rotate the pt's thighs.
- Dr. places pads of thumbs bilaterally upon the ischial tuberosities, applying firm and continuous lateral pressures. Ask pt. to cough
- Appreciate release.

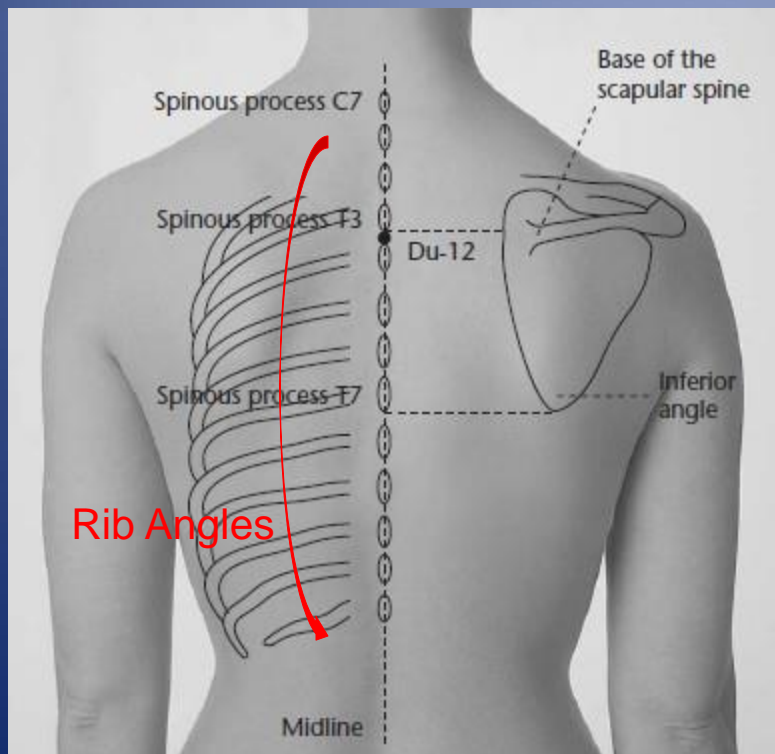


OMT

Edema

Rib Raising

- Pt. supine or seated
- Dr. contacts the rib angles with fingertips of both hands.
- Gently push or pull the rib angles anteriorly for 20 sec or repetitively until rib mobility improves.



Thank You

Any Questions?



References

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