

Treating Back Pain in Pregnancy with Osteopathic Manipulation

By:

Fredrick Wilson, D.O.

Facts

- Low back pain (LBP) occurs in 1/3 to 2/3 of pregnant women
- Previous LBP before pregnancy increases the risk x 2
- Higher maternal age is a risk factor
- Height, weight and weight gain are not risk factors

Cause

- Increase in ligament laxity is caused by increase of hormones estrogen and relaxin in pregnancy
- One study showed pregnant women most incapacitated by LBP had highest amounts of relaxin

Sacral Ligaments

More Facts

- Herniated discs rare in pregnant women, $\sim 1/10,000$
- Hyperlordosis occurs as the gravid uterus induces accentuation of the anterior pelvic tilt. The sacroiliac joints resist this rotation. As pregnancy progresses, both forward rotation and hyperlordosis continue as the sacroiliac joints become lax. This continues to increase mechanical strain on the low back, sacroiliac joints and pelvis.

Symptoms

Pregnant women develop LBP or posterior pelvic pain aggravated by activity and relieved by sitting or lying down. Pain occasionally radiates into posterior thighs but usually not past knee. The pain is usually persistent but not severe.

Exam

- Standard neuromuscular exam including ROM, DTR`s, LE strength
- Assess leg length standing and supine
- Check sacral inhalation, standing and seated flexion tests
- Assess pelvis and sacrum prone if still early in the pregnancy

Imaging

Imaging should be done after 1st trimester only if symptoms are unusual or very severe. Although no recognized biological effects of MRI on the developing fetus have yet been reported, long-term effects have not been conclusively evaluated. Only done with cauda equina, loss of strength or severe pain.

Treatment

- Aquatic therapy can help
- Acetaminophen
- NSAIDs can cause premature closure of the ductus arteriosus in the fetus
- Other class B drugs include cyclobenzaprine, oxycodone (not near term). Prednisone can also be used.
- Care should be coordinated with obstetrician (I do not Rx)
- One study used acupuncture which helped 72% of women
- Lidoderm has been allowed by most OB`s

More Treatments

- Pregnant belts can be helpful
- Diathermy and therapeutic US are contraindicated as fetal development may be affected. TEN's has been used during labor and delivery
- No literature on use of traction but caution due to ligament laxity should be used.

Sacroiliac Belts

Treatment for Herniated Discs

- Conservative is the rule
- Epidurals have been done without fluoroscopic guidance.
- Surgery can be done for progressive neurologic deficit or cauda equine.

OMT for Pregnant LBP

- Avoid HVLA to low back or pelvis. I do use in thoracic.
- Use gentler techniques-Still, CS, ME

Standing Flexion Test/Pelvis Dysfunction

Seated Flexion Test/Sacral Dysfunction

Sacral Dysfunction

Myofascial Release to Sacrum



Craniosacral Motion

Hands-on OMT Session #1

- Treat sacrum with myofascial release

Muscle Energy to Anterior Pelvis (Longer Leg)



Muscle Energy to Posterior Pelvis (Shorter Leg)



Hands-on OMT Session #2

- Treat pelvic somatic dysfunction with muscle energy
 - 1) Treat anterior pelvis
 - 2) Treat posterior pelvis

Still Technique for Anterior Innominate



Anterior Innominate #2



Anterior Innominate #3



Still Technique for Posterior Pelvis



Posterior Innominate #2



Posterior Innominate #3



Hands-on OMT session #3

- Treat pelvic somatic dysfunction with Still Technique
 - 1) Treat anterior pelvis
 - 2) Treat posterior pelvis

Pelvis Exercises

Compress pillow for 4 seconds



Push out against theraband for 4 seconds



Anterior Pelvis Exercise(Longer Leg)



Posterior Pelvis Exercise (Shorter Leg)



Practice Pelvic Exercises

- Practice Pelvic exercises
 - 1)Knees together/apart
 - 2)Anterior pelvis exercise
 - 3)Posterior pelvis exercise

Directions: Two Times Daily

- Sacral technique 90-100 seconds
- Apply pressure on and off slowly
- Anterior pelvis(longer leg): Wife pushes knee into hands four seconds with light to moderate force. Rest 4 seconds. Repeat 3 more times each time with wife`s knee a little closer to chest.
- Posterior pelvis(shorter leg): Husband does not pull shorter leg. He resists wife pulling at hip 4 seconds. Rest 4 seconds. Repeat 3 more times. Cough on wife`s last pull.
- Pelvis exercises as needed.

Thank You!