

## UNIT 8: OSTEOPATHY AND WOMEN'S HEALTH CARE

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# Educational Topic 63: Osteopathy in Obstetrics

### Intended Learning Outcomes:

The student should be able to:

- Describe how musculoskeletal, postural and biomechanical factors affect fertility
- Identify patients that may benefit from treatment of somatic dysfunction before pregnancy
- Including patients with:
  - Short leg syndrome
  - Chronic pelvic pain
  - Chronic low back pain
- Discuss maternal musculoskeletal/structural changes associated with pregnancy
- Describe how osteopathic manipulation may affect the physiology of pregnancy
- Perform musculoskeletal, postural and biomechanical screening exams throughout prenatal care
- Perform the treatments for common somatic dysfunctions in pregnancy including
  - Round ligament syndrome
  - Pubic shear
  - Carpal tunnel syndrome
  - Low back pain
- Prepare the female pelvis for delivery via OMM in the third trimester
- Discuss the normal and abnormal structural, musculoskeletal, and biomechanical changes of the postpartum period including
  - Involution of the uterus and how it affects pelvic structures
  - Persistent low back pain after pregnancy
- Describe the common somatic dysfunctions of the postpartum period and describe their corresponding OMT
  - Symphysis diaphysis
  - Sacroiliac dysfunction
  - Pubic shear
  - Low back pain
  - Breast engorgement and mastitis
  - Postpartum depression

### TEACHING CASE

CASE: A 28 year old G1P0 presents to your office for her first prenatal visit at 8w4d from her last menstrual period. She has had some nausea over the past two weeks, and has vomited several times, but not daily. She does complain of low back pain that began about the same time as the nausea but denies cramping, vaginal bleeding, or dysuria. Pt denies any significant medical history and

reports having had a tonsillectomy when asked about surgical history. The only medication she is taking is a prenatal vitamin with DHA. Her BP is 110/68, pulse 78, respirations 16, height 5'3", and weight is 218lb. Physical exam is benign but noted are large, pendulous breasts without masses/skin changes/nipple discharge and an 8wk uterus with no tenderness or masses palpated in the adnexa. Routine first trimester labs are ordered and the patient is instructed to return in 4 weeks for routine follow up.

Her nausea and vomiting resolve by her next visit and her prenatal care continues uneventfully until her 20wk appointment. She then complains of a sharp left sided pain that occurs mostly when she is rolling over in bed or twisting to get out of a car. Her Level 1 Ultrasound was normal and her vitals remain stable. She denies any contractions, vaginal bleeding, or gush of fluid. She reports that she has started to feel the baby move and this pain is a different entity than fetal movement. The low back pain that she reported at her initial visit is still present, but mild and relieved with rest. You diagnose her acute pain, educate her, and implement a treatment plan.

Prenatal care continues without complication, but the patient does report bilateral tingling and pain in the first three digits of both of her hands at her 32 week visit. She states that by the end of the day, she can barely hold a phone to her ear secondary to the discomfort. When asked about her low back pain, she reports that she "has good and bad days" but Tylenol and massage help. Her BP is 124/70 and her 1hr glucose tolerance test was normal. Plus 2 edema is noted in her bilateral lower extremities. You diagnose her acute pain, educate her, and implement a treatment plan.

At the 36 week visit the patient reports that her back pain has become daily and more intense. Rest, massage, and Tylenol are no longer managing the pain. You fully evaluate her and determine that she has only musculoskeletal causes for her back pain. You perform an Osteopathic structural exam and treat her during her appointment and weekly thereafter.

The patient delivers a female weighing 7lb 9oz via SVD at 38 5/7 weeks. She pushed for 2.5 hours and did have a second degree midline laceration, but otherwise her delivery and postpartum hospital course were unremarkable. She returns to your office 2 weeks later complaining of pelvic pain with numbness that radiates down her outer thighs. She has no fever, foul smelling lochia, or complaints of fundal tenderness or heavy bleeding. You perform a physical exam and treat her somatic dysfunction.

#### Competency-Based Discussions & Key Teaching Points:

Competencies addressed:

- Patient Care
- Medical Knowledge
- Interpersonal and Communication Skills

1. Had this patient presented to you prior to pregnancy, what would you have educated her about and what Osteopathic manipulation treatment plans could you have started to help with her fertility and musculoskeletal complaints?

2. What are some common musculoskeletal/structural changes that occur in pregnancy that may be contributing to the above patient's back pain?

3. How can OMM help with some of the normal physiologic changes of pregnancy that the patient is experiencing?

4. What are the underlying causes of the patient's acute pain syndromes and how would you diagnose and treat them using Osteopathic techniques?

5. Describe the common somatic dysfunctions that occur in the post-partum period and propose OMT techniques to alleviate them.

#### REFERENCES

Chila, Anthony et al. *Foundations of Osteopathic Medicine*. 3<sup>rd</sup> Edition. Lippincott Williams & Wilkins. 2011.

Digiovanna and Schiowitz. *An Osteopathic Approach to Diagnosis and Treatment*. 3<sup>rd</sup> edition. Lippincott Williams & Wilkins. 2005.

\*\* must cite diagram appropriately \*\*