Unit 8: Osteopathy and Women's Health Care

Educational Topic 59: Introduction to Osteopathic Principles in Obstetrics and Gynecology

Intended Learning Outcomes:
The student will demonstrate the ability to:

- List the basic tenets of Osteopathic medicine
- Define somatic dysfunction in terms of Tenderness, Asymmetry, Restriction of motion, and, or Tissue texture changes (TART)
- Describe a structural exam of the female
- Describe the different types of Osteopathic Manipulative Treatments (OMT) commonly used in women’s health care including:
  - High Velocity/Low Amplitude
  - Muscle energy
  - Myofacial Release
  - Osteopathy in the Cranial field
  - Strain/counterstrain
  - Soft Tissue/Articulatory Techniques
  - Lymphatic treatment
  - Balanced ligamentous tension
  - Facilitated positional release
  - Progressive inhibition of neuromuscular structures
  - Functional technique
  - Visceral manipulation
  - Still technique
- Identify evidence supporting the use of OMT in ob-gyn

Teaching Case:

Case: A healthy appearing 24 year-old G1P0 female at 19 weeks gestation presents to the clinic for a prenatal visit. She complains of a sharp pain in her right hip when she attempts to stand up. She says the pain is more of a dull ache when she’s sitting down or standing. The pain doesn’t radiate, but she has noticed an increase in frequency of urination with dysuria. She denies vaginal itching or odor. She says her hip pain and urinary symptoms began about a week ago, and she wants to make sure she doesn’t have a urinary tract infection. Otherwise she has been feeling well and has no other complaints.

Vital signs are normal. Physical examination reveals a gravid abdomen consistent with gestational age with fetal heart tones 140 beats per minute. There is no suprapubic tenderness or costovertebral angle tenderness. Structural examination revealed a positive standing flexion test on the left, level iliac crests and anterior superior iliac spines, and level pubic bones superiorly. On a more thorough evaluation of the pubic bones, an inferior shear on the left side was discovered.
A urinalysis with dipstick is negative for leukocyte esterase, and a urine sample is sent for urinalysis. Her temperature is 97.5 degrees Fahrenheit.

The physician decides to treat the patient's somatic dysfunction using muscle energy. After treatment the pubic bones are level superiorly-inferiorly. When the patient is asked to stand up she reports the sharp pain she was feeling is no longer there. The patient is told to monitor the frequency of urination and to call the clinic if she still feels burning during urination. The negative dipstick will be confirmed with the urine culture in 24-48 hours.

Competency-Based Discussions & Key Teaching Points:
Competencies addressed:
- Patient Care
- Medical Knowledge

1. What are the basic tenets of osteopathic medicine?

   - The four basic tenets of osteopathic medicine include:
     - The human being is a dynamic unit of function
     - The body possesses self-regulatory mechanisms that are self-healing in nature
     - Structure and function are interrelated at all levels
     - Rational treatment is based on these principles

2. What are TART findings?

   - Tenderness
   - Asymmetry
   - Restriction of motion
   - Tissue texture changes

Key Teaching Point:
Osteopathic philosophy starts with understanding that successful treatment involves attention to the whole person: Body, mind and spirit. Comprehensive osteopathic treatment of the female patient attends to her emotional and psychological as well as physical state.

Pain can be devastating for any patient. Osteopathic treatment addresses pain and improves function. By treating somatic dysfunction in women, the body can regain its regulatory functions and regain a state of health.

3. What common somatic dysfunctions are seen in pregnant women?

   - Lumbar spine dysfunction
   - Pelvic dysfunctions
     - Anterior or posterior innominate rotations
     - Inflared or outflared innominate
   - Pubic symphysis dysfunction
     - Superior or inferior pubic shear
     - Anterior or posterior pubic shear - uncommon
   - Psoas spasm
   - Piriformis spasm
   - Pelvic floor muscle spasm
     - Coccygeus
     - Levator ani

Copyright © 2016 by Association of Professors of Gynecology and Obstetrics (APGO).
For permissions: apgoadmin@apgo.org
Key Teaching Point:
Low back pain is frequently reported during pregnancy. Maternal weight gain and postural changes are two prominent causes of low back pain. A growing uterus displaces the women’s center of gravity, which also causes the pelvis to tilt anteriorly. A lumbar lordosis is noted as a compensatory change and causes increased strain on the lumbar spine and sacroiliac joints. The psoas muscle may become shortened with the increased lordotic curve and contributes to lumbar strain.

During pregnancy, hormones such as progesterone and relaxin increase ligament laxity and play a large role in the widening of the pubic symphysis. There may be an increase in pubic symphysis dysfunction beginning in the 1st trimester and continuing throughout the pregnancy.

Vertical pubic shear is the most common pubic dysfunction. Anterior-posterior pubic shear is uncommon and can occur with significant trauma. It causes significant pelvic pain.

4. Which treatment modalities are commonly used during pregnancy?

- Myofascial Release
- Balanced Ligamentous Tension
- Strain/counterstrain
- Functional Technique
- Muscle energy
- High Velocity Low Amplitude

Key Teaching Point:
Pregnancy poses challenges for the practitioner in positioning the patient during manipulation. The technique may depend on the patient’s ability to sit or lie down. Some practitioners prefer to use indirect techniques instead of direct techniques. Direct techniques may be used, but must be performed carefully with precise positioning. It is important to assess maternal and fetal health before treating somatic dysfunction.

5. Identify evidence supporting the use of OMT in OB-GYN

Key Teaching Point:
There are many sources of osteopathic medical literature that show efficacy of osteopathic treatment for a number of diagnoses, including pregnancy and gynecologic conditions. The student should be able to identify sources of evidence in the scientific literature.

REFERENCES