UNIT 8: OSTEOPATHY AND WOMEN’S HEALTH CARE

Educational Topic 64: Osteopathy in Gynecology

Intended Learning Outcomes:
The student should be able to:

• Diagnose somatic dysfunction as a possible etiology for acute pelvic pain including:
  § Iliosacral dysfunction
  § Pubic shear
    o Vertical
    o Anterior-Posterior
  § Sacroiliac dysfunction
  § Sacral Torsion
  § Myofascial strains
  § Restrictions of the pelvic diaphragm

• Describe the musculoskeletal, structural, and biomechanical factors that may be associated with chronic pelvic pain

• List appropriate uses of OMT to manage acute and chronic pelvic pain

• Identify possible tissue changes that are not visible by imaging for patients with a history of sexual abuse

• Describe ways OMT can help prepare a patient for surgical gynecologic procedures

• Discuss ways OMT can be used to decrease need for analgesics in the postoperative period

• Perform OMT for the postoperative conditions that have been shown to benefit
  § Ileus
  § Edema

TEACHING CASES

CASE 1, ACUTE PELVIC PAIN – DYSMENORRHEA: An 18 year old female presents with a complaint of severe menstrual cramps for the past 7 months. The patient describes cramping pain and a constant low backache beginning with her menstrual cycle and ending two days later. Associated symptoms are bloating, occasional diarrhea and anorexia. Her mother states that she has missed a few days of school because of pain.

Her reproductive history includes menarche at age 15, cycles every 28 days with 4-5 days of flow. She is nulliparous. She denies sexual activity and has had the HPV vaccine. The patient’s mother and sister both have dysmenorrhea. Her general examination, including pelvic examination, is unremarkable except the osteopathic exam. The structural exam shows TART changes as follows; bogginess at T10 – L 2, pubic shear superior on the right, and left on left sacral torsion

Competency-Based Discussions & Key Teaching Points:
Competencies addressed:

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1. What signs/symptoms/exam findings would indicate a diagnosis of primary dysmenorrhea?

The patient's pain appears to be limited to the menstrual cycle and immediately after, which would be consistent with primary dysmenorrhea. Endometriosis would be in the differential given the family history. Early stages of endometriosis do not necessarily cause significant pain between cycles. The patient should be treated for primary dysmenorrhea with consideration of endometriosis if treatment is not successful.

2. What is the significance of the TART changes found at T10-L2?

Sympathetic innervation of the uterus is at levels T10-L2. Viscerosomatic reflexes from the uterus could cause structural changes in this area. If the area is treated and shows immediate improvement in pain, but the pain returns rapidly (within 24 hours), viscerosomatic reflexes are most probable.

3. What OMT procedures can you perform to address the sacral torsion?

Muscle energy techniques are often used to address sacral dysfunction. Sometimes a sacral torsion will correct by treating dysfunction at L5-S1. Soft tissue techniques and myofascial release could also be considered.

Key Teaching Points:
Dysmenorrhea produces low back pain and a pain pattern typical of trauma induced low back pain on EMG. One study has shown the effects of OMT on this type of back pain. OMT abolished the EMG activity in the lumbar spinae erector muscles, and stopped the patient perception of cramping and pain. Other research also verifies that OMT is effective in relieving low back pain and cramping with dysmenorrhea. If a brief trial of OMT is not effective in reducing pain, a more significant visceral condition is possible. The patient should be treated with normal protocols for dysmenorrhea keeping in mind the possibility of a familial endometriosis.

CASE 2, CHRONIC PELVIC PAIN, URINARY INCONTINENCE: 47 year old G4 P4004 female presents with pelvic pain for 2 years. She has had extensive work up by her family physician and GI specialist. Results are all negative and diagnostic laparoscopy is being considered. She states her pain is greater on the right side, and it radiates into her buttock, but not down her leg. It is constant but is worse with sitting. She has urgency, mild pain with urination, and stress incontinence on occasion. She denies past psychological trauma, but was injured in a motor vehicle accident when her car was rear ended about 2 years ago. She states she was not hurt in the accident and was wearing her seat belt.

Social history was taken. The patient teaches seventh grade, is married, has four children all NSVD, and does yoga. During review of systems, she admits to constipation, occasional urinary incontinence and denies dyspareunia. Medical history includes hemorrhoids and a motor vehicle accident about 2 years ago. Past surgical history is negative. Medications include an over the counter hemorrhoid cream used PRN.

Examination was unremarkable. Pelvic exam showed an antverted uterus, which is midline and hypermobile, no adnexal masses, and tenderness along the right levators. Grade 1 uterine descensus is identified with Valsalva. Neurologic exam revealed upper and lower deep tendon reflexes 2/4 bilaterally. Sensation was also intact upper and lower extremities. Structural exam showed a restricted right pelvic diaphragm, bilaterally restricted thoraco-abdominal diaphragm, thoracic inlet restricted bilaterally, R innominate anterior, and L on R sacral torsion.

Competency-Based Discussions & Key Teaching Points:
Competencies addressed:

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Questions & Key Teaching Points

1. What is your differential diagnoses?

- Urinary incontinence
- Hemorrhoids
- Pelvic floor prolapse
- Somatic dysfunction of the pelvic floor

2. How do you incorporate OMT into her care?

A trial of OMT is appropriate to address the structural findings. Asymmetric tensions in the pelvic floor can contribute to pain, prolapse and hemorrhoids. Correction of the sacral torsion and performing a pelvic diaphragm release may improve the patient's occasional stress incontinence. Ischial tuberosity spread has been effective in treating hemorrhoids.

Key Teaching Points

Urinary incontinence occurs when the musculature of the pelvic floor, anal, or ureteral sphincters have inappropriate (usually low) tone and can lead to organ prolapse, constipation, and urinary incontinence. A risk factor of pelvic floor dysfunction in women is childbirth (multiparity, difficult delivery, large infant at birth, operative delivery). Obesity and increasing age are other factors as well as menopausal hormone changes. In this patient, a history of a motor vehicle accident at about the time the symptoms began would support somatic dysfunction as a possible etiology of her symptoms. A trial of OMT may be performed with further workup and medical treatment if the symptoms do not improve.

REFERENCES

The main content of this teaching module is from *DS A6 –Dysmenorrhea, Prostatitis, Pelvic Pain*, by Sharon Gustowski DO, MPH, Chair of the Department of OPP. University of the Incarnate Word-School of Osteopathic Medicine, 2014.


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