Educational Topic 37: Pelvic Floor Disorders

Rationale: Pelvic organ prolapse, urinary incontinence and anal incontinence (pelvic floor disorders) are increasingly common with the aging of the U.S. population. These conditions have a major impact on a woman’s quality of life.

Intended Learning Outcomes:
A student should be able to:

- Describe normal pelvic anatomy and pelvic support
- List risk factors for pelvic floor disorders
- Describe signs and symptoms of pelvic floor disorders
- Differentiate the types of urinary incontinence
- Discuss the steps in evaluation of pelvic floor disorders
- Describe the anatomic changes associated with pelvic floor disorders
- Describe non-surgical and surgical management options for pelvic floor disorders

TEACHING CASE

CASE: A 75-year-old woman G5P5 woman presents for an annual exam and reports a “fullness” in the vaginal area. The symptom is more noticeable when she is standing for a long time. This feeling is bothersome to her and is affecting her daily activities. She does not complain of urinary or fecal incontinence. She has no other urinary or gastrointestinal symptoms. There has been no vaginal bleeding. Her past medical history is significant for well-controlled hypertension and chronic bronchitis. She has never had surgery.

Pelvic exam reveals normal appearing external genitalia except for generalized atrophic changes. The vagina and cervix are without lesions. Relaxation of the anterior and posterior vaginal wall are noted to approximately one centimeter beyond the hymen when she is asked to Valsalva. The cervix also descends to the level of the hymen with Valsalva. Uterus is normal size. Ovaries are not palpable. No rectal masses are noted. Rectal sphincter tone is slightly decreased. The patient wishes to discuss options for treatment.
COMPETENCY-BASED DISCUSSION & KEY TEACHING POINTS:
Competencies addressed:
• Patient Care
• Medical Knowledge
• Interpersonal and Communication Skills
• Systems-Based Practice

1. What are the most important support mechanisms for the pelvic organs?
   • Levator ani muscles in combination with ligaments and connective tissues (such as the uterosacral ligaments for the uterus and vaginal apex, and the vesicovaginal and rectovaginal connective tissues for the anterior and posterior vaginal wall) create support for the pelvic organs. When one or both of these support mechanisms is compromised, pelvic organ prolapse can occur if the other mechanism is unable to compensate.

2. What increases this patient’s risk for pelvic organ prolapse?
   • The risk of pelvic organ prolapse is very multifactorial. The greatest risk factor for pelvic organ prolapse is pregnancy and delivery. Other risk factors can include increased intra-abdominal pressure (from a chronic cough, habitual straining, heavy lifting, or constipation), obesity and genetics.

3. What are the symptoms of pelvic organ prolapse?
   • Many women with prolapse will complain of seeing or feeling a bulge in the vaginal area. Heaviness or fullness in the vagina or “something falling out” are common complaints.
   • Many women will complain of worsening symptoms with prolonged standing. Often women will relate that symptoms are relieved with lying down.
   • Urinary frequency, urgency, incontinence or retention can be associated with anterior vaginal wall prolapse. The need for rectal splinting, or replacing the posterior vaginal wall to complete stool evacuation, can be associated with posterior vaginal wall prolapse.

4. What are the different types of pelvic organ prolapse?
   • Anterior vaginal prolapse – cystourethrocele, cystocele
   • Apical vaginal prolapse – uterovaginal, vaginal vault (post surgery) – vaginal vault prolapse is often an enterocele
   • Posterior vaginal prolapse – rectocele

5. What are the steps in evaluating someone with prolapse?
   • The most important thing to evaluate is patient bother. Prolapse is not dangerous for a woman unless it is impacting her ability to empty her bladder (causing urinary retention).
   • The Pelvic Organ Prolapse Quantitative (POPQ) is an objective evaluation tool that gynecologists and pelvic floor specialists (Urogynecologists) use to measure prolapse. Grading systems (such as the Baden Walker system) may also be used to document prolapse.
   • If indicated, evaluation for urinary retention (such as performance of a post void residual) should be completed.
   • Some providers will also evaluate levator muscle strength by asking a woman to perform a Kegel squeeze on examination.
6. What are treatment options that you should discuss with this patient?

- Treatment options for prolapse include pelvic floor physical therapy, pessary, and surgical management.
- Pelvic floor physical therapy has been shown to decrease symptoms related to pelvic organ prolapse for some women, and is a conservative, low risk option for women to increase pelvic floor muscle strength.
- Pessaries are vaginal devices that create support for the pelvic organs. There are many types and sizes of vaginal pessaries, and a woman is fit for her own, specific pessary if she chooses this as an option. Pessaries are also excellent conservative, low risk options for women with prolapse. They can be removed by the patient, or she can return to the physician office every 2-3 months for removal, cleaning, and replacement.
- There are multiple surgical options for women with prolapse that can include vaginal, abdominal, laparoscopic or robotic approaches.

7. When is surgery indicated for prolapse?

- Patient desire for definitive surgical correction
- Recurrent vaginal ulcerations or other complications of pessary use

8. What are the different types of urinary incontinence?

- Stress urinary incontinence: the complaint of involuntary leakage of urine associated with exertion effort, sneezing or coughing
- Urge incontinence: the complaint of involuntary leakage of urine associated with or immediately preceded by urgency. The patient might complain of feeling the urge to urinate with subsequent leakage of urine.
- Mixed urinary incontinence: a combination of stress and urge incontinence
- Continuous incontinence: continual urine passage (commonly caused by vesicovaginal fistula)

9. What are the steps in evaluating someone with urinary incontinence?

- Evaluation of a patient who complains of urinary incontinence should include questions to clarify what type of incontinence they are experiencing, along with a physical examination and a urinalysis.
- Many providers may do a cough stress test or a post void residual to further evaluate bladder function during physical examination. Urodynamic testing may be performed if the provider feels that this is warranted. Some providers will have patients fill voiding diaries to evaluate symptoms.

10. What are nonsurgical treatment options for urinary incontinence?

- Behavioral modification is important to discuss with patients with incontinence symptoms. Decreasing bladder irritants and timed voids can be important and low risk treatments for many women.
- Pelvic floor physical therapy or muscle strengthening exercises (Kegel’s) can be important and effective in managing urinary incontinence symptoms. This might include biofeedback and/or bladder retraining.
- Medical therapy primarily focused on treatment of detrusor overactivity (the pathophysiology associated with urgency and urge incontinence) can include anticholinergics.
- Incontinence pessaries can be effective for the treatment of stress incontinence symptoms.
REFERENCES


