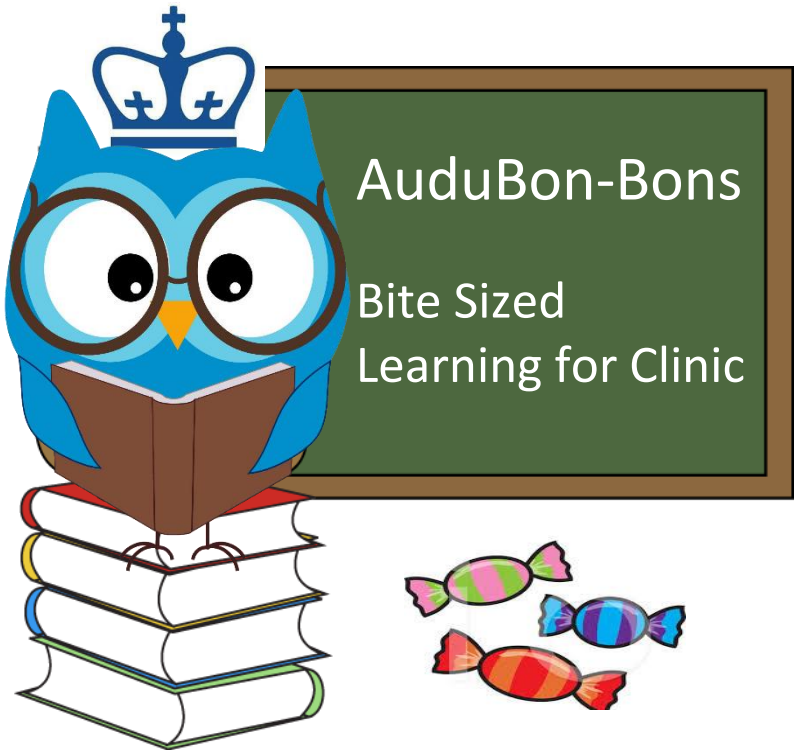
STRESS URINARY INCONTINENCE
NON-SURGICAL MANAGEMENT



Week 80

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Reading Assignment:
ACOG Practice Bulletin 155, Nov 2015, “Urinary Incontinence in Women”

LEARNING OBJECTIVES

- To review basic office assessment of urinary incontinence
- To understand conservative management options of stress urinary incontinence
- To learn how to counsel patients on these options

CASE VIGNETTE

- Patient is a 36 yo G5 P5006 woman who presents with a 4 month history of worsening urinary incontinence.
- She reports loss of urine with coughing, sneezing, and valsalva. She denies any dysuria, polyuria, incontinence associated with urgency, incontinence without inciting symptoms, or need to splint to void. Reports frequent constipation

FOCUSED HISTORY

What elements of this patient's history are most relevant?

- **PMH:** Chronic HTN
- **PSH:** C/S x 2, BTL
- **POBH:** 3 x NSVD, 1'CS for twins, elective 2'CS
- **PGYNH:** Regular menses q28d x 5d
  LMP 2 weeks ago
- **SH:** denies toxic habits; lives with husband and 6 children; homemaker; denies IPV
- **MEDS:** Amlodipine, multivitamin
- **ALL:** Denies

PERTINENT PHYSICAL EXAM FINDINGS

What elements of this patient's physical exam are most relevant?

Vital signs: BP 130/88, P 90, T 37.0, wt 120 kg, height 165 cm, BMI 44.1 kg/m^2

General: No acute distress, overall appears well, obese habitus

Abdomen: Soft, NT/ND, no r/g/masses, well-healed Pfannenstiel

Gyn: NEFG, no lesions; normal vaginal mucosa; no CMT, parous; no abnormal discharge; uterus 6 wk size, AV, NT, no adnexal masses/tenderness

-Cough stress test: Positive with reduction of anterior vaginal wall

-PVR: 10 mL

-Q-tip test: 10 degree change from horizontal

-POP-Q:

0	-1	-6
3	2	10
-2	-2	-8

BRIEF OVERVIEW

- **What are the types of urinary incontinence?**
  - Stress
  - Urgency
  - Mixed
- **What does a basic office evaluation of UI consist of?**
  - History and physical (can include POP-Q)
  - Assessment of urethral hypermobility
  - Post-void residual and UA
  - Cough stress test (supine and standing, full bladder ~ 300 mL)
- **What are the categories of treatment options for SUI?**
  - Conservative
  - Surgical

CONSERVATIVE MANAGEMENT OF SUI

- <u>Pelvic floor muscle exercises</u>
  - Strengthen the voluntary periurethral and perivaginal (urethral sphincter and levator ani) muscles
  - Used alone or in combo with other methods, i.e. weight loss, biofeedback, electrical stimulation
  - Considered first line; 50% of women w/ SUI-dominant symptoms report improvement after 1 year
    - However, objective and subjective 1-year cure rates are less compared to surgical management
      - Mid-urethral sling as first-line treatment alternative
    - Most effective if initiated with physician supervision

- How do you counsel your patients on how to perform effective pelvic floor muscle exercises?
  - Squeeze/hold a pelvic muscle x 3 seconds then relax x 3 seconds
  - 10 repetitions, 3 times a day
  - Increase length of muscle contraction by 1 second each week until they reach 10 seconds with each rep (or can start with 8-10 seconds with each contraction)
  - Start in supine position, then while sitting/standing
  - Use a mirror to observe muscles if needed
  - Insert a finger in the vagina to assess if performing exercises correctly; finger should be lifted/squeezed
- Additional modalities to improve performance of exercises
  - Pelvic floor physical therapy
  - Vaginal weighted cones
  - Biofeedback

BEHAVIORAL/ LIFESTYLE MODIFICATIONS

- (up to 50% reduction in mean incontinence episodes vs 15% in controls in one RCT)
  - **Weight loss**
    - 4.2-fold greater risk of SUI in obese women
    - Moderate weight loss (8% of baseline weight in 1 study) effective
      - In overweight & obese women with T2DM, each 1-kg reduction led to 3% decrease in development of UI
  - **Bladder training** (beneficial in SUI/UUI/mixed UI)
    - Timed voids, training schedule to increase intervals between voids
  - **Fluid management**
    - Reduction in excess fluid intake (<2 L per day)
    - Stop fluid intake hours prior to bedtime (if nighttime incontinence is an issue)
  - **Other**
    - Avoid medications/foods that worsen UI (e.g. caffeine)
    - Avoid constipation
    - Quit smoking (reduce cough/Valsalva)

BEHAVIORAL/ LIFESTYLE MODIFICATIONS

- Incontinence pessary
  - Supports the urethra, increases urethral resistance
  - Mixed evidence on benefit
    - One study shows pessary use was less satisfactory than behavioral physical therapy by 3 months; however, similar satisfaction at 1 year (50%)
  - Option for patients who desire non-surgical management, want immediate results rather than wait for effects of behavioral modification/physical therapy, will not adhere to behavioral modification techniques
    - Especially useful in women with concomitant pelvic organ prolapse, desiring conservative management
  - Requires routine visits for cleaning and maintenance
  - Risks of erosion, bleeding, new-onset voiding difficulty; but most commonly reported side effect is vaginal discharge

BEHAVIORAL/ LIFESTYLE MODIFICATIONS

- Other
  - Vaginal estrogen may be feasible for perimenopausal/menopausal women with stress (or urgency) incontinence
  - Topical estrogen formulations:
    - Topical estrogen cream 0.5 gm twice weekly
    - Estradiol tablet twice weekly
    - Estradiol ring q 3 months
  - Is systemic estrogen therapy beneficial?
    - No, evidence shows increased risk of SUI

CASE, CONTINUED

What issues need to be addressed with the patient?

- Stage 2 AVWP
- Stress urinary incontinence

How would you manage her symptoms?

- Voiding diary x 3-5 days with review
- Offer conservative therapy, including kegel exercises, weight loss/lifestyle and behavioral modifications
- Pharmacotherapy & incontinence pessaries if refractory if remains symptomatic
- Referral to urogyn for persistent symptoms/surgical management

SOCIAL DETERMINANTS OF HEALTH

- Many women do not seek care for urinary incontinence due to strong negative perceptions of the disease, or lack of recognition as incontinence as a treatable medical problem
- Women in lower-income communities have decreased rates of patient-provider discussion of incontinence
- Women at higher risk of incontinence, such as diabetes, have also been shown to have received assessment and treatment of urinary incontinence

Urinary incontinence is one of the most common diseases that has significant and detrimental effects on a patient's quality of life. However, timely diagnosis and management is still lacking, especially in lower-income populations, whether due to systematic barriers, lack of health care access, or cultural barriers. Remember to screen for urinary incontinence in your patients during the annual exam!

EPIC .PHRASE

BBonSUImedmgmt

Description: Stress urinary incontinence medical management counseling

We reviewed management options for stress urinary incontinence, including expectant, medical, and surgical options. The patient desires conservative, non-surgical management.

We reviewed behavioral modification, including ***weight loss (at least 5% body weight), ***smoking cessation, bladder training, fluid management, and avoidance of bladder stimulating medications and foods.

We discussed pelvic floor exercises, including types of exercises, techniques, duration, and efficacy compared to surgical management. We discussed need for adherence to an exercise regimen for at least 3 months in order to see benefit. We also reviewed the risks, benefits, and alternatives to incontinence pessaries for women with symptoms refractory to behavioral modification and pelvic floor exercises, and for women who desire more immediate benefit in symptoms.

***For postmenopausal women with vaginal atrophy, we discussed use of topical vaginal estrogen for reduction of symptoms of stress urinary incontinence.

CODING AND BILLING

ICD-10

N39.3 - Stress incontinence

CPT Code

Established outpatient visit: at least 99213 (higher if attending sees patient with you)

New outpatient visit: at least 99203 (higher if attending sees patient with you)

EVIDENCE

Urinary incontinence in women. Practice Bulletin No. 155. American College of Obstetricians and Gynecologists. Obstet Gynecol 2015; 126:e66 – 81.

Evaluation of uncomplicated stress urinary incontinence in women before surgical treatment. Committee Opinion No. 603. The American College of Obstetricians and Gynecologists. Obstet Gynecol 2014; 123:1403–7.

Yazdany T et al. American urogynecologic society systematic review: the impact of weight loss intervention on lower urinary tract symptoms and urinary incontinence in overweight and obese women. Female Pelvic Med Reconstr Surg 2020;26:16–29

Lukacz E. Treatment of urinary incontinence in females. Up To Date. Apr 2020. Accessed 2020. Retrieved from https://www.uptodate.com/contents/treatment-of-urinary-incontinence-in-females

Al-Shaikh G et al. Pessary use in stress urinary incontinence: a review of advantages, complications, patient satisfaction, and quality of life. Int J Womens Health. 2018; 10: 195-201.

Pelvic floor muscle exercises and bladder training. American Urogynecologic Society. 2016. Accessed 2020. Retrieved from https://www.augs.org/assets/2/6/Bladder_Training.pdf.

Duralde, E et al. Bridging the gap: determinants of undiagnosed or untreated urinary incontinence in women. Am J Obstet Gynecol. 2016 Feb; 214(2):266.e1-266.e9.

Szymona-Palkowska K et al. Selected determinants of quality of life in women with urinary incontinence. Prz Menopauzalny. 2014 May; 13(2): 82-88.