Advanced Care for Female Overactive Bladder & Urinary Incontinence

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Goals

Participants will:

- Review normal urinary tract anatomy and function
- Understand Overactive Bladder (OAB) Symptoms
- Understand the different types of incontinence and identify which type you have
- Learn practical strategies to self-manage urinary symptoms and incontinence
- Learn about medical and surgical treatment options for OAB symptoms and incontinence
- Learn about available local resources to assist you manage your problem and improve the quality of your life
Normal Urinary Tract Anatomy

Kidneys make urine

Urine travels down the ureters to the bladder

Bladder stores urine between voids

Urine flows through urethra during urination

Urinary sphincter & pelvic muscles keep you from leaking

Kidneys
Ureters
Bladder
Urethra
Normal Bladder Function

Stores urine with no symptoms

No leakage of urine between urinations
Normal Bladder Function

Normal sensation of fullness when the bladder is full

- Bladder contracts and urine flows
- Sphincter relaxes

Time to get to the bathroom
Abnormal Bladder Function

- The bladder doesn’t store urine well
  - Urinary urgency and frequency
- There is leakage of urine between urinations
  - Urge incontinence
  - Stress urinary incontinence
  - Mixed incontinence
- The bladder does not empty well
  - Overflow incontinence
  - Pelvic organ prolapse
Implications of Bladder Problems

- **Decreased quality of life**
  - Interferes with work
  - Interferes with social life and family activities
  - Avoidance of sexual activity

- **Reduced physical activity**
  - Weight gain

- **Increased risk of falls**

- **Expensive**
  - Pads and protective garments
Discussion Overview

Overactive Bladder (OAB)

Stress Urinary Incontinence

Mixed Urinary Incontinence

Pelvic Organ Prolapse
Overactive Bladder (OAB)
Overactive Bladder

This is a bladder storage problem
Types of Overactive Bladder

- **OAB Dry**
  - Frequent, uncontrollable urges to urinate *without leakage*
  - Fear of not making it to the bathroom on time
  - More than 7 urinations per day
  - Bladder never feels completely empty
  - Interferes with quality of life and activities

- **OAB Wet**
  - Involuntary leakage of urine associated with an abrupt and uncontrollable urge to urinate
  - Interferes with quality of life and activities
The Cause of Most Cases of OAB

- UNKNOWN
Other Causes of OAB

- **Dietary factors**
  - Caffeine
  - Alcohol
  - Dehydration
  - Acidic foods
  - Spicy foods

- **Estrogen Deficiency**

- **Medications**
  - Diuretics (a.k.a., water pills)
Other Causes of OAB

- Other medical conditions
  - Constipation
  - Bladder infection
  - Swelling in legs
  - Diabetes
  - Neurologic conditions: stroke, MS, Parkinson’s
  - Tobacco use

- Pelvic organ prolapse
OAB Evaluation

- Complete questionnaires
- 24-hour voiding and food diary
- Physical exam
- Urine tests
- Special testing as determined by your medical provider:
  - Cystoscopy
  - Urodynamic Study
OAB Treatments

- There are no cures for an OAB

- The goals of therapy are to:
  - Lessen frequency of bothersome symptoms
  - Lessen intensity of bothersome symptoms
  - Lessen volume of urine lost
  - Improve quality of life
OAB Dietary Treatments

- Avoid bladder irritants
  - Caffeine
  - Alcohol
  - Acidic and spicy foods
  - Any other identifiable bladder irritant
    - use food diary to identify the culprit

- Remove and then add back foods if you are uncertain if a certain food acts like a bladder irritant

- Stay well hydrated
  - Drink 5-6 8-oz. glasses of water daily

- Prevent constipation
OAB Behavioral Treatments

Break the habit of responding to every urge!

What to do when you get the urge to urinate?
- **STOP** and stand still, sit down if possible
- **TIGHTEN** pelvic floor muscles 3-5x
- Breathe
- Relax
- Distract yourself
- **WALK** to the bathroom when the urge has decreased
OAB Behavioral Treatments

Retrain your bladder!

- Schedule frequent urinations by the clock
- Double void, if necessary
- Slowly increase time between voids as the bladder is able to hold more urine
  - Goal: 6-8 oz. urine every 3-4 hours is normal
- Avoid “Just in case” voiding
- No straining or “pushing” urine out of bladder
- Toileting position (no hovering)
OAB Behavioral Treatments
Other OAB Behavioral Treatments

- Weight Loss
- Smoking cessation
- Biofeedback and physical therapy
  - Augments self-care
OAB Medical Treatments

Oral medications are the #1 treatment option

- May help 50-80% of women
- One pill taken orally 1 – 3 times daily
- Dose may be adjusted as needed to
  - improve response
  - minimize side effects
Types of OAB Oral Medications

- **Short-acting medication**
  - Oxybutynin (generic), a.k.a. Ditropan®
  - Effective treatment option
  - Less convenient 2-3 times daily dosing
  - Least expensive
  - Highest rate of side effects
Types of OAB Oral Medications

- **Long-acting medication**
  - Brand name medications: Ditropan XL®, Tolteridine, Solefenicin, Darifenacin, Trosplum, etc.
  - Higher cost
  - More convenient once daily dosing
  - Fewer side effects
  - Trosplum is best for those at risk of cognitive side effects
Side Effects of Oral OAB Meds

- **#1 Dry mucus membranes**
  - Dry mouth, eyes, nose
  - Minimize with Biotene, gum, sugarless candy

- **#2 Constipation**
  - Increase dietary fiber and water consumption

- **Blurry vision**

- **Memory loss or confusion in those at high risk**

- **Indigestion, heart burn**

- **You can’t take these medications if you have closed angle glaucoma, GI motility disorder, dementia**
Oxytrol patch: Another OAB Medication Option

- Best for those who:
  - did not tolerate side effects of oral medications
  - have a medical reason why they can’t take one of the oral medications
  - patient preference

- Equally as effective as the oral medications

- One patch applied to skin twice weekly.

- Most common side effect:
  - Skin irritation at site of patch
  - Minimal problem with dry mouth and constipation
Other OAB Medical Treatments

- **Vaginal estrogen replacement**
  - For post menopausal women
  - May be done in conjunction with oral mediation or patch
  - May be administered inside the vagina as a cream, suppository, or ring
  - Most effective when taken over the long term
OAB Medication Considerations

- Do your symptoms bother you enough to try medication?
- Have you exhausted non medical treatment options (dietary changes, biofeedback, etc.)?
- Are the possible side effects acceptable relative to the possible benefit?
- Do you prefer taking a pill one time daily versus 2-3 times daily?
- Do you prefer to wear a patch that is changed 2 times per week?
- Cost – generic versus brand name?
Minimally Invasive OAB Treatment Options

- Posterior tibial nerve stimulation (PTNS)
- Bladder Botox injections
- InterStim®
Posterior Tibial Nerve Stimulation

- Controls bladder function by stimulating nerves that control bladder
- May be as equally effective as oral medications

Benefits:
- Avoid medication side effects

May be best for:
- Women who failed behavior therapy or medication(s)
- Women who did not tolerate oral medications
- Women at risk of experiencing cognitive problems
- Patient preference

Risks are mild and temporary
Posterior Tibial Nerve Stimulation

- Fine acupuncture-like needle inserted above ankle into a nerve
- Electrical stimulator attached to needle
- Low-voltage electrical stimulation for 30 mins per session
- One 30-minute treatment session/week for 10-12 weeks

May require long term repeat treatments ever 3-4 weeks to maintain benefit
Bladder Botox Injections

- Outpatient, minimally invasive surgery
- Botox is injected directly into bladder muscle
- Each injection lasts approximately 9 months
- **NOT FDA-APPROVED**
- Risks:
  - Urinary tract infection
  - Blood in urine
  - Immunity
  - **Urinary retention in 5-20% of women**
Sacral Nerve Stimulation

Also known as a “pacemaker for the bladder” or InterStim® therapy

- Controls bladder function by stimulating nerves that control your bladder
- 60 to 80% of women experience symptomatic improvement
- May be best for women who have failed or are not candidates for other treatment options
**Sacral Nerve Stimulation**

Minimally invasive procedure

Two step process
- Step 1 – Test
- Step 2 – Implantation
Sacral Nerve Stimulation

- **Risks:**
  - Mechanical/electrical failure
  - Lead migration
  - Infection
  - Undesirable sensations or pain
Which OAB treatment option is best for you?

- Behavior modification
- Oral medications
- Patch
- Vaginal estrogen cream
- Posterior tibial nerve stimulation
- Botox injections
- InterStim®

Your preference!
Questions?
Stress Urinary Incontinence
Stress Urinary Incontinence

- Involuntary loss of urine
  - Cough
  - Sneeze
  - Laugh
  - Lifting heavy object
  - Exercise
  - Sexual intercourse

- Causes distress
- Negatively impacts quality of life
Causes of Stress Urinary Incontinence

- Weak urinary sphincter and pelvic floor muscles:
  - Childbirth
  - Genetics
  - Prior pelvic surgery
  - Aging
    - Decreased estrogen levels

- Bladder pressure:
  - Obesity
  - Constipation
  - Cough, sneeze, laugh, heavy lifting, etc....
Stress Urinary Incontinence Treatments: Overview

- Weight loss
  - Very important
- Smoking cessation
- Treat medical causes of a chronic cough
- Kegel exercises
- Urethral injections
- Urethral sling surgery

Our focus today
Kegel Exercises

Best for mild cases of stress urinary incontinence

- Simple exercises that strengthen pelvic floor muscles
- Can be done anywhere at any time
- Must be done regularly and consistently to be effective
- May take a long time help (>6 months) to help
Before & after Kegel exercises

BEFORE

AFTER
Squeeze before you sneeze!
Peri-urethral injections

- Minimally invasive outpatient surgery
- Inject bulking material into urethra to make it more water tight
Peri-urethral injections

SNEEZE

Inject bulking material into urethra

BIG LEAK

Smaller leak
Peri-urethral injections

- **Low success rates**
  - 20-30% of women may have some benefit after 2-5 injection sessions
  - Best candidates:
    - Not medically fit for mid urethral sling
    - Limited mobility
    - Patient preference

- **Risks:**
  - Infection, urinary urgency/frequency, painful urination, urinary retention
Mid urethral sling surgery

The Gold Standard Treatment Option

- Two types:
  - Transvaginal tape procedure (TVT)
  - Transobturator sling procedure (TOT)

- Overall success rate: 85%
Anus
Urethra
Bladder
Vagina

3 small incisions

Insert sling under urethra

Mid Urethral Sling Surgery
Mid Urethral Sling Surgery

- **Outpatient surgery**
  - Go home the same day as the surgery

- **Anesthesia**
  - Spinal or general

- **Minimally invasive surgery**
  - One small vaginal incision
  - Two small skin incisions
  - Sling is composed of a permanent, synthetic mesh that becomes incorporated into your body
## Mid Urethral Sling Surgery

### Recovery process
- No lifting over 10 pounds for 4-6 weeks
- No straining for 4-6 weeks
- No vigorous exercise for 4-6 weeks
- No vaginal intercourse for 4-6 weeks
- No swimming pool use or bathing in a bathtub for at least two weeks
- Most women can resume work within 1 week
Mid Urethral Sling Surgery

- **Intra operative risks**
  - Injury to bladder
  - Injury to urethra
  - Injury to blood vessels or bowel (very rare)

- **Long term risks**
  - Recurrent incontinence
  - New or worse urinary urgency and/or frequency
  - Urinary retention
  - Mesh erosion
  - Need for removal of sling
Questions?
Mixed Urinary Incontinence
Mixed Urinary Incontinence

- Leakage of urine with both:
  - Urgency
  - Coughing, sneezing, laughing, lifting, etc.

- Treatment options are the same as what has already been discussed

- Initial treatment is directed by your most bothersome symptom(s)

- Multiple different treatments may be necessary

- Your medical provider will guide you
Pelvic Organ Prolapse
Pelvic Organ Prolapse

- Drop in pelvic organ(s) from normal location:
  - Bladder (called a cystocele)
  - Rectum (called a rectocele)
  - Cervix and uterus
  - Vagina (called vaginal vault prolapse)
Pelvic Organ Prolapse

- **Symptoms:**
  - Feeling of pelvic pressure (most common)
  - Something falling out of vagina
  - Urinary hesitancy
  - Constipation
  - OAB symptoms
  - Incontinence
  - Painful intercourse
Pelvic Organ Prolapse

- Diagnosed by examination

- Treatment will depend on your symptoms:
  - Observation
    - Weight loss
    - Dietary changes
    - Kegel exercises
    - Avoid heavy lifting
    - Smoking cessation
  - Pessary
  - Surgery
Questions?
Action Plan

- Complete bladder diary
- Complete questionnaire
- Read handouts
- Go to My Doctor Online for more information
- Recommended: Attend the Gynecology Department’s Urinary Incontinence Class: Self-care for Women
  - Kegel exercises
  - Healthy habits
- Get urinalysis
- Schedule follow up appointment
  - Bring bladder diary and questionnaire