

# Advanced Care for Female Overactive Bladder & Urinary Incontinence

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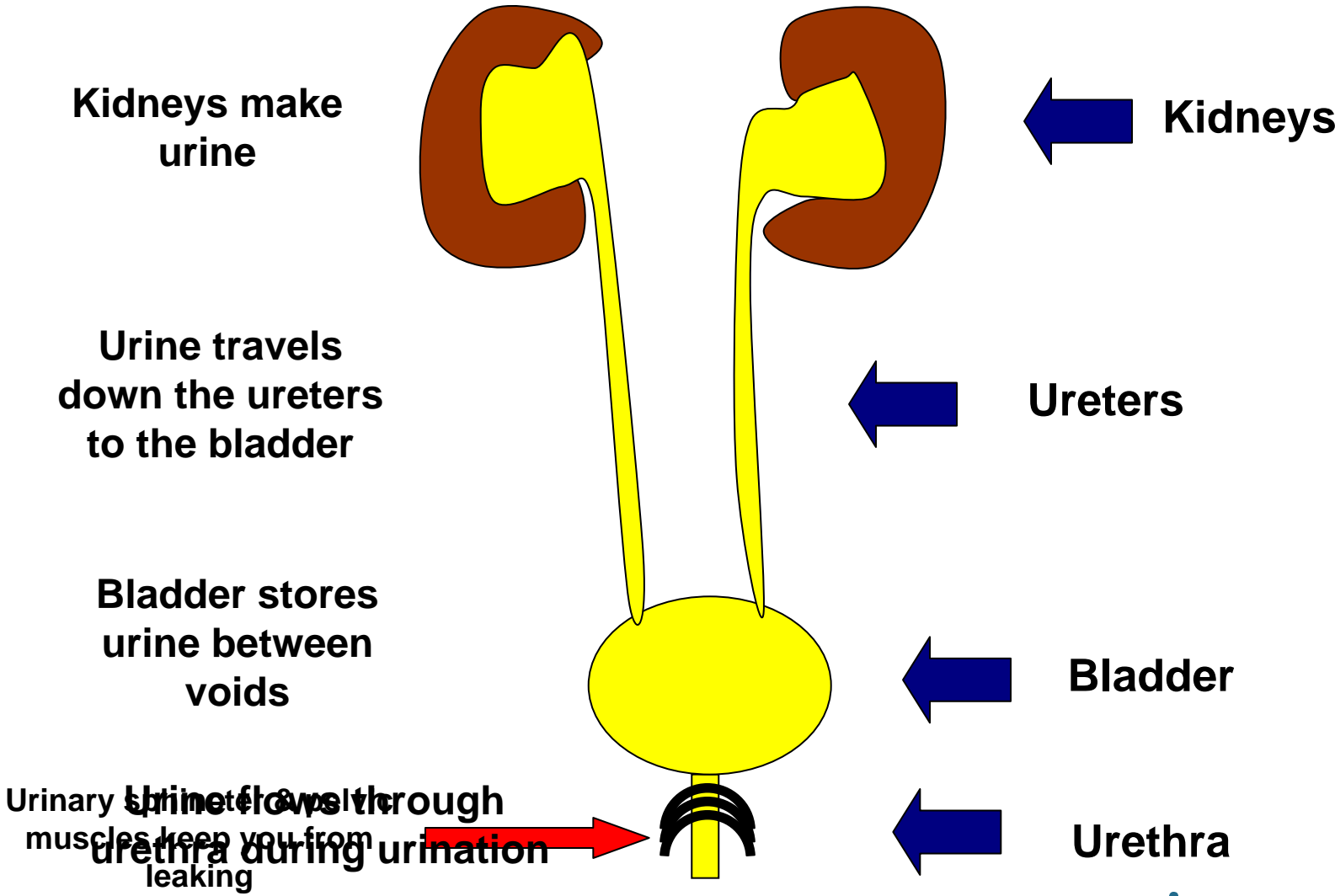


# Goals

## Participants will:

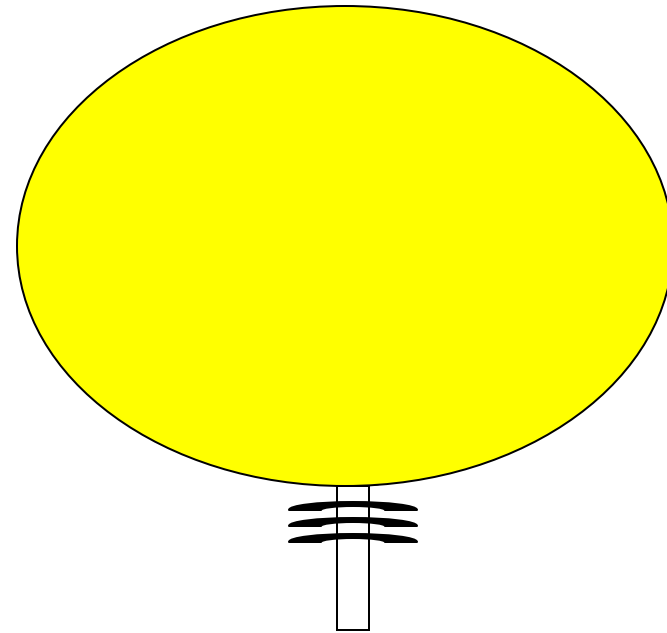
- Review normal urinary tract anatomy and function
- Understand Overactive Bladder (OAB) Symptoms
- Understand the different types of incontinence and identify which type you have
- Learn practical strategies to self-manage urinary symptoms and incontinence
- Learn about medical and surgical treatment 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

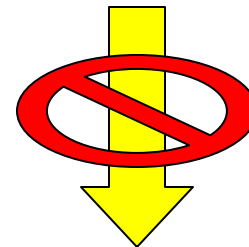


# Normal Bladder Function

**Stores urine with no symptoms**

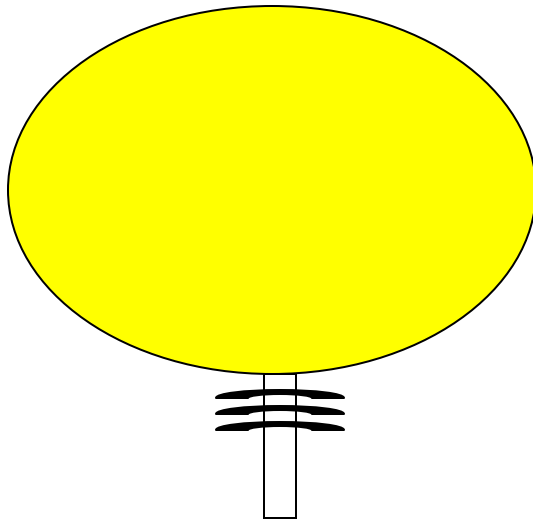


**No leakage of urine between urinations**



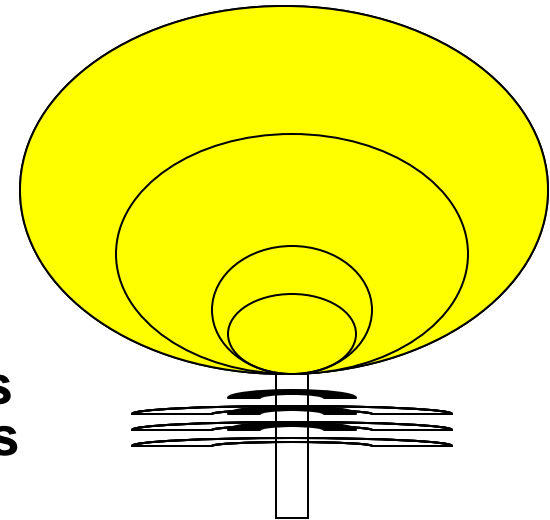
# Normal Bladder Function

Normal sensation of fullness  
when the bladder is full



Time to get to  
the bathroom  
→

~~Bladder contracts~~  
Sphincter relaxes  
and  
urine flows





# 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)

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# 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**

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# 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

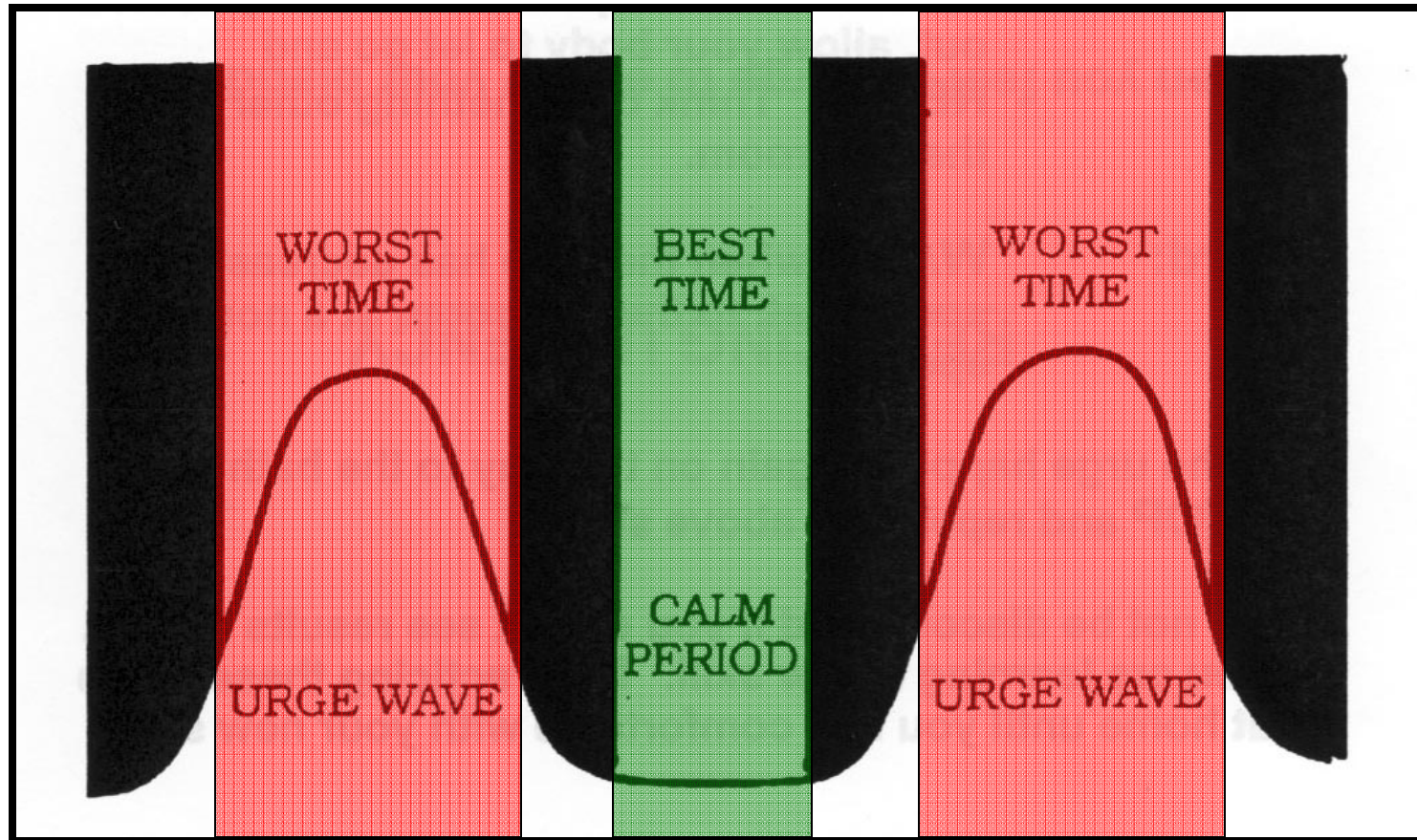
# OAB Behavioral Treatments

## 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, Trospium, etc....
- Higher cost
- More convenient once daily dosing
- Fewer side effects
- Trospium 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 medication 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®



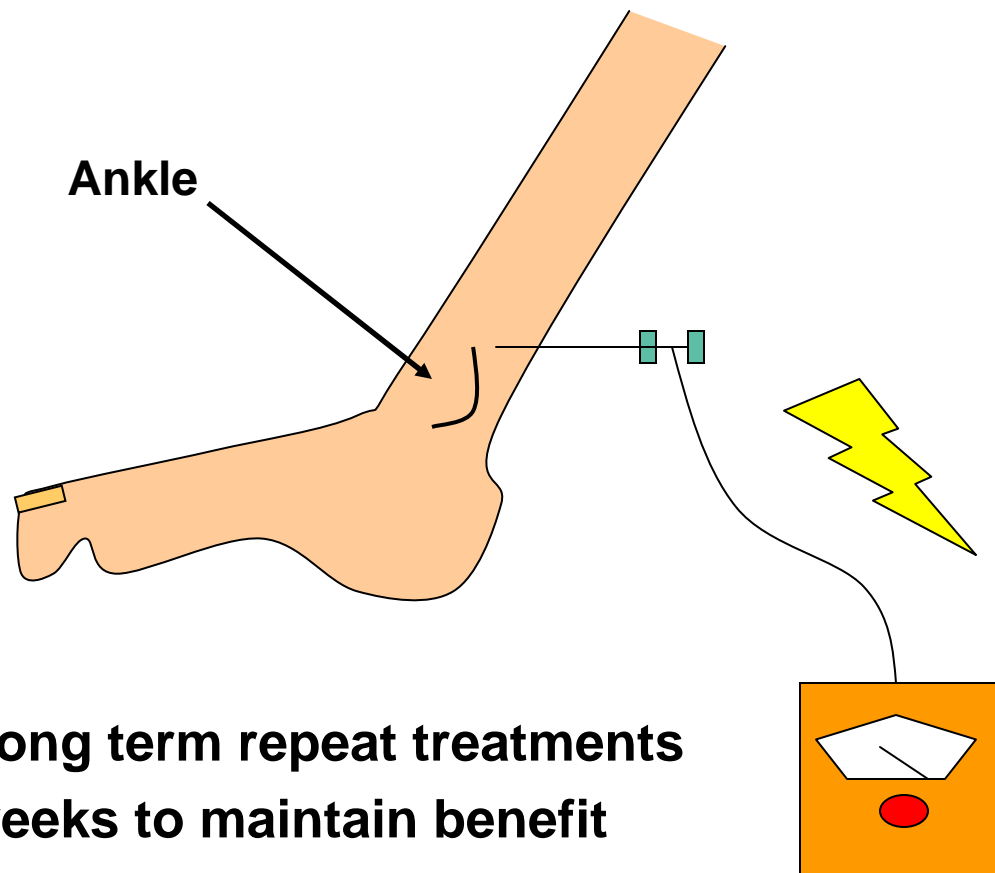
# Posterior Tibial Nerve Stimulation

- **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

Low-voltage electrical stimulation for 30 minutes per session  
Fine acupuncture-like needle inserted above ankle into a nerve  
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

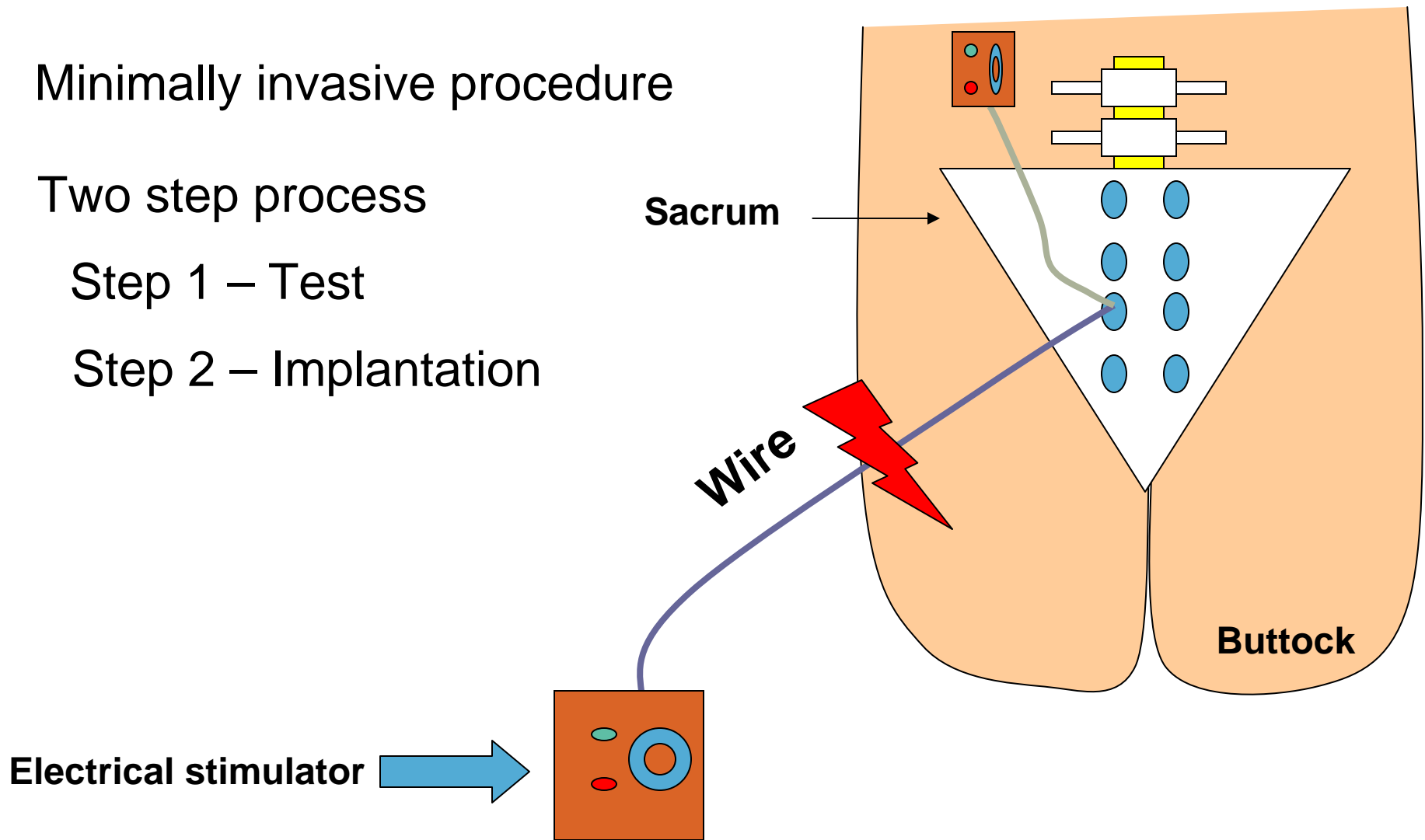
# Sacral Nerve Stimulation

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

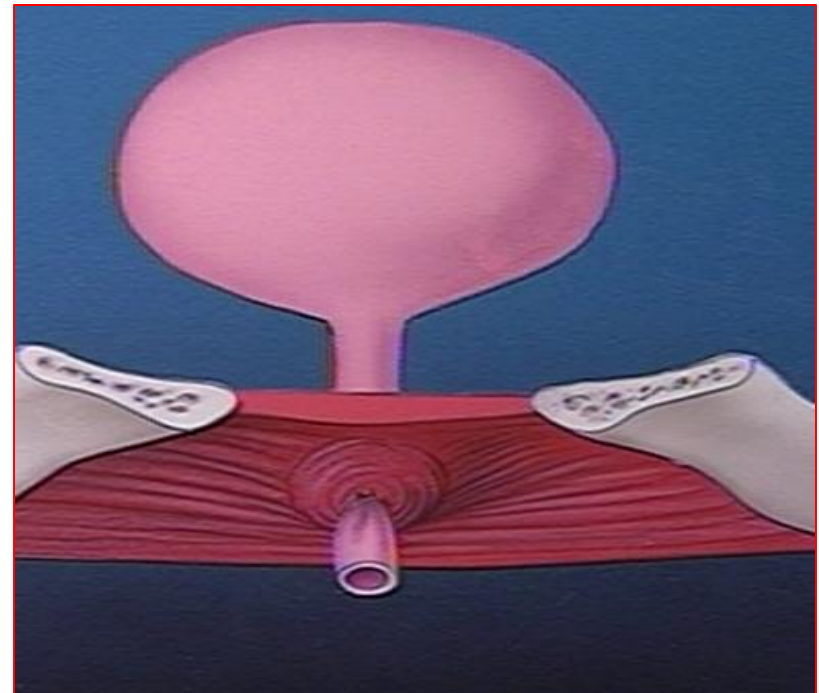
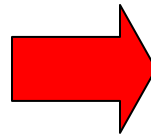
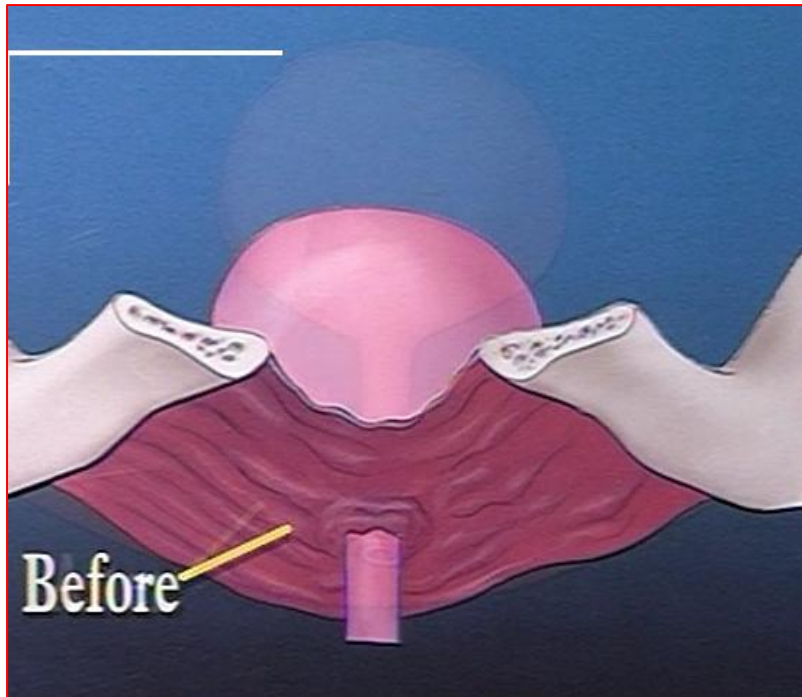
# Kegel Exercises

**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



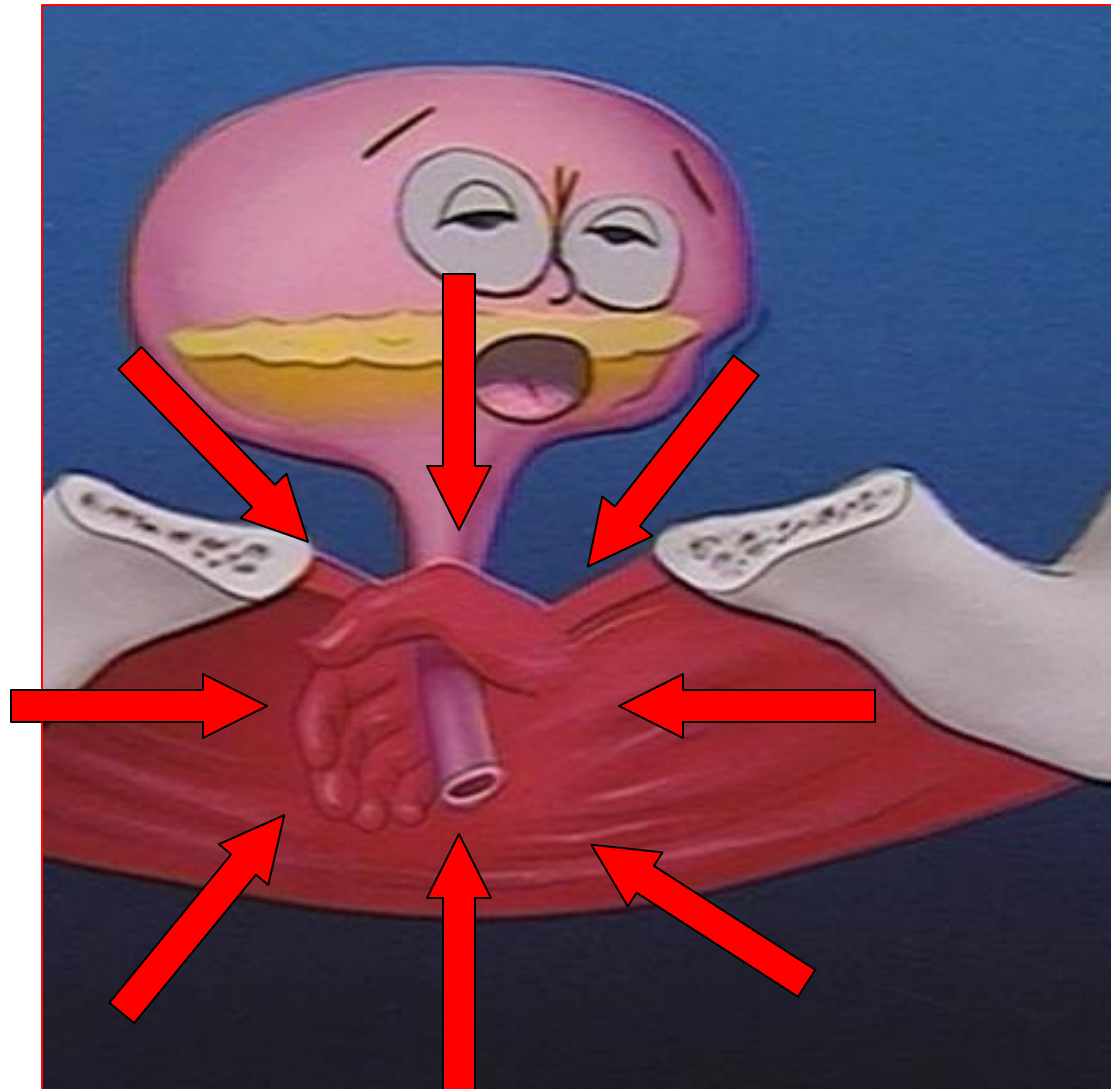
# Before & after Kegel exercises



**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

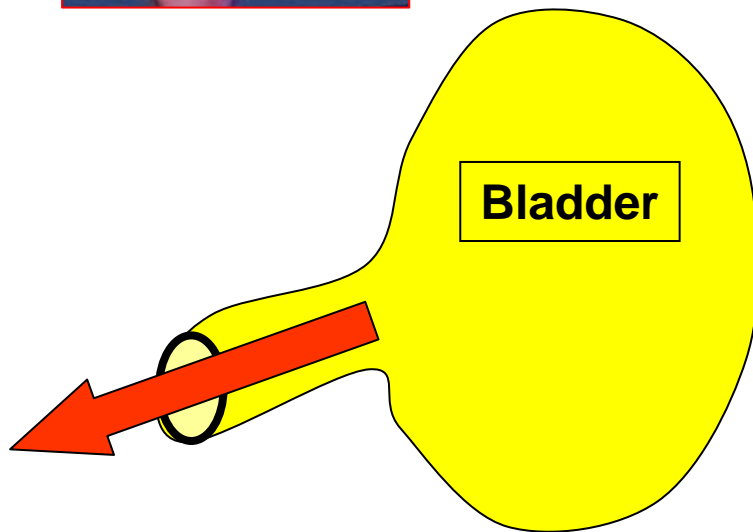
**SNEEZE**



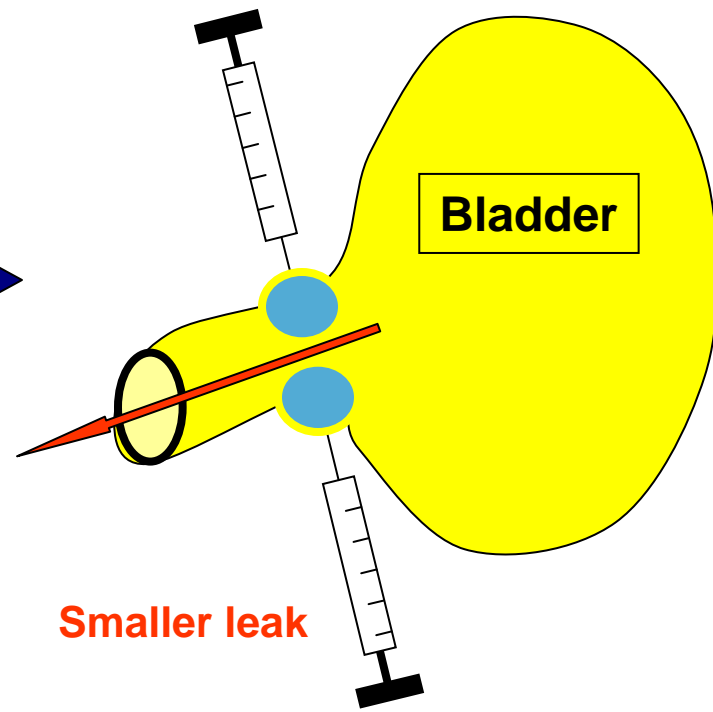
**SNEEZE**



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

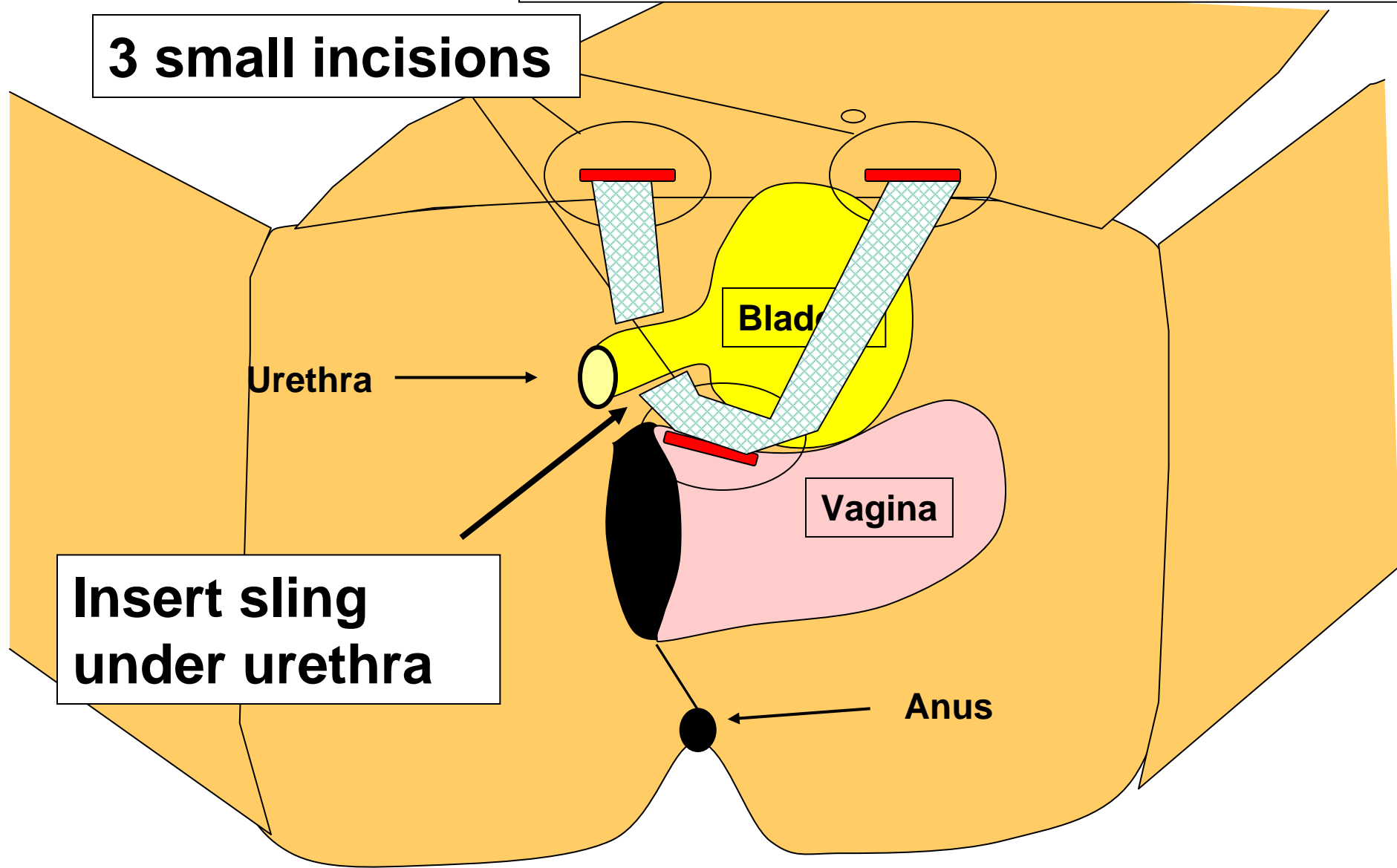
# Mid urethral sling surgery

## The Gold Standard Treatment Option

- Two types:
  - Transvaginal tape procedure (TVT)
  - Transobturator sling procedure (TOT)
- Overall success rate: **85%**

# Mid Urethral Sling Surgery

**3 small incisions**



**Insert sling  
under urethra**

# 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