

Management of Female Stress Incontinence

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**Stress
Incontinence**

**“Involuntary
loss of urine,
objectively
demonstrable
& social or
hygienic
problem”**

Female Stress Urinary Incontinence

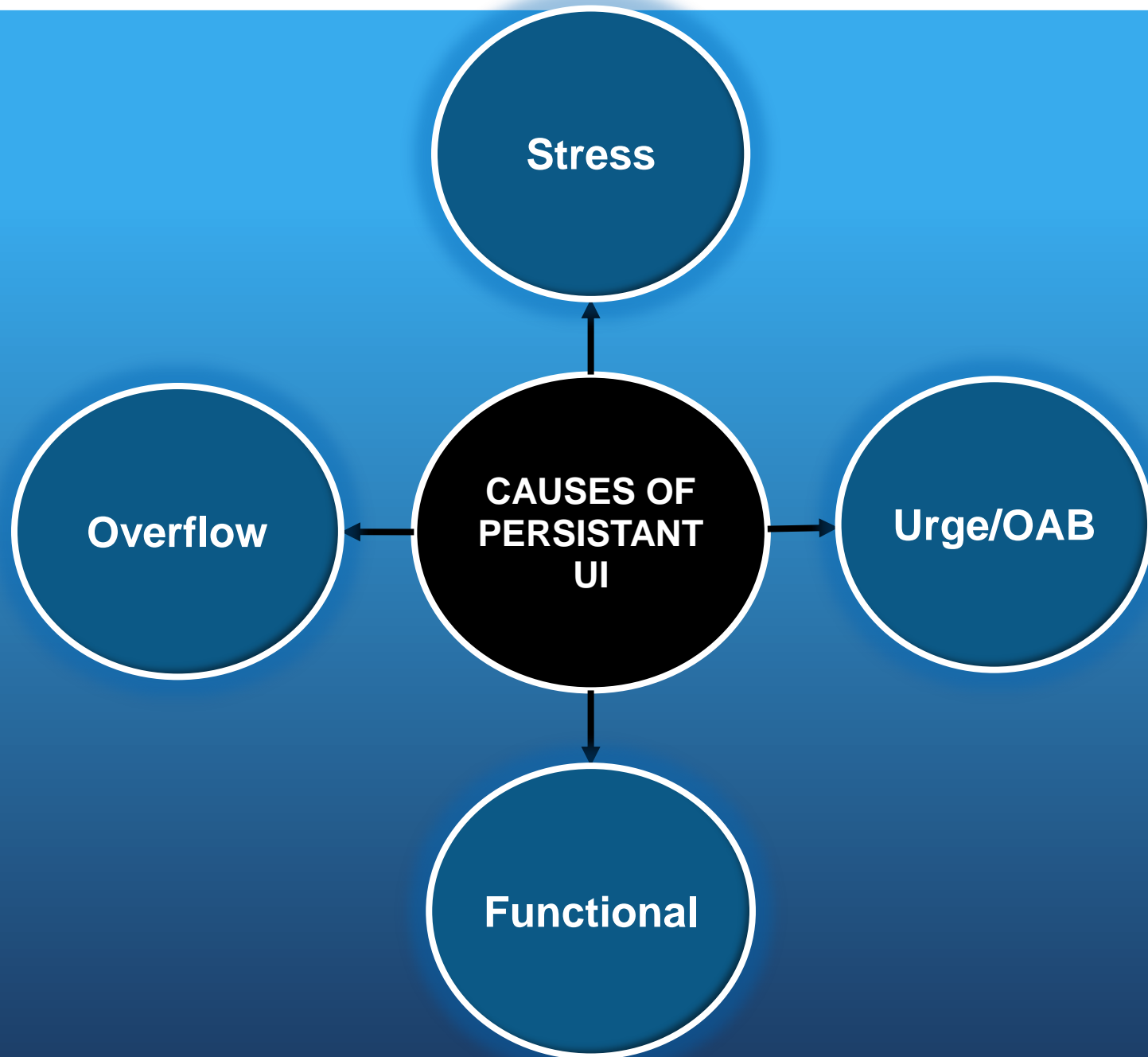
- Significant impact on women's lives
- Result in negative body image & reduced self esteem.
- 70% patients do not seek professional.
- Combination of embarrassment & belief that SUI is natural consequence of ageing and childbirth .

Increased Intra-abdominal Pressure:

- Pregnancy
- Pulmonary disease – smokers cough
- Constipation/straining
- Lifting – work and home
- Exercise
- Obesity

Basic Evaluation of UI

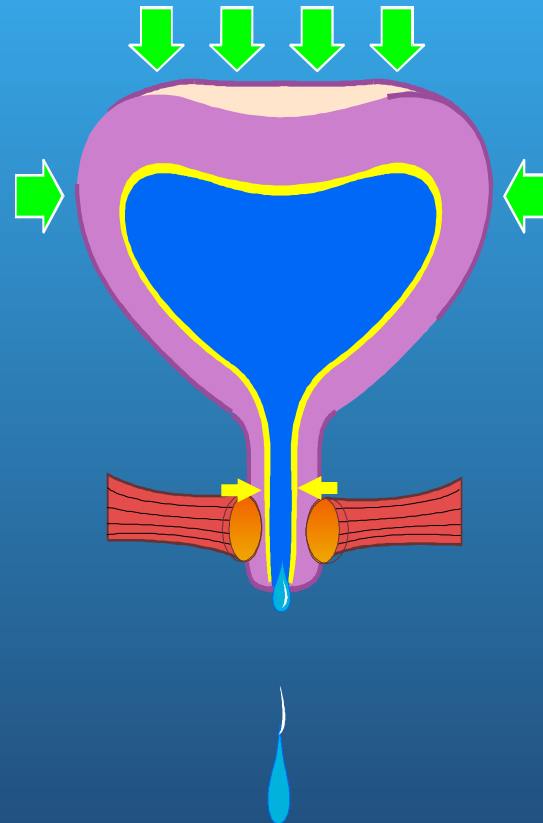
- History: Bladder diary
- Physical examination, especially genitourinary & neurological.
- Bladder stress test
- Postvoid residual
- Urinalysis, urine culture if indicated
- BUN, Creatinine, Fasting glucose



Stress UI

Abrams P et al. *Urology*. 2003;61:37-49.

The complaint of involuntary leakage with effort or exertion or on sneezing or coughing



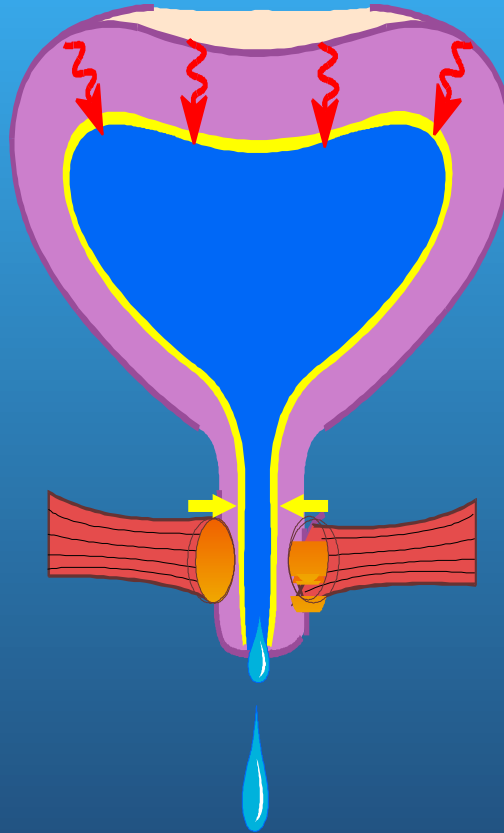
 Sudden increase in abdominal pressure

 Urethral pressure

Urge UI

Abrams P et al. *Urology*. 2003;61:37-49. Ouslander J. *N Engl J Med*. 2004;350(8):786-799.

The complaint of involuntary leakage accompanied by or immediately preceded by urgency



-  Involuntary detrusor contractions
-  Urethral pressure

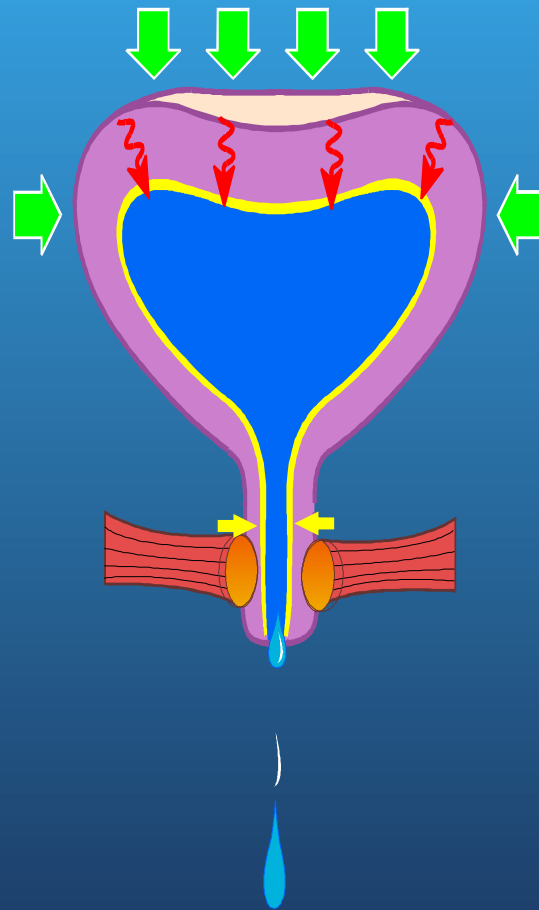
Overactive bladder




- Includes urinary urgency with or without urge incontinence, urinary frequency, and nocturia
- Associated with involuntary contractions of the detrusor muscle

Mixed UI

Abrams P et al. *Urology*. 2003;61:37-49. Chaliha C et al. *Urology*. 2004;63:51-57.

The complaint of involuntary leakage associated with urgency and also with exertion, effort, sneezing, or coughing



-  Sudden increase in abdominal pressure
-  Involuntary detrusor contractions
-  Urethral pressure

Investigations

- **Midstream urine sample**
To check for disease, infection
- **Renal Ultrasound**
To check the ureters and residual urine.
Problems such as bladder tumours or fibroids, which can obstruct the urinary tract.
- **X-ray**
Detecting kidney or bladder stones.

Investigations

Cystoscopy -To detect any inflammation, stones or growths in the bladder or any obstructions in the urethra.

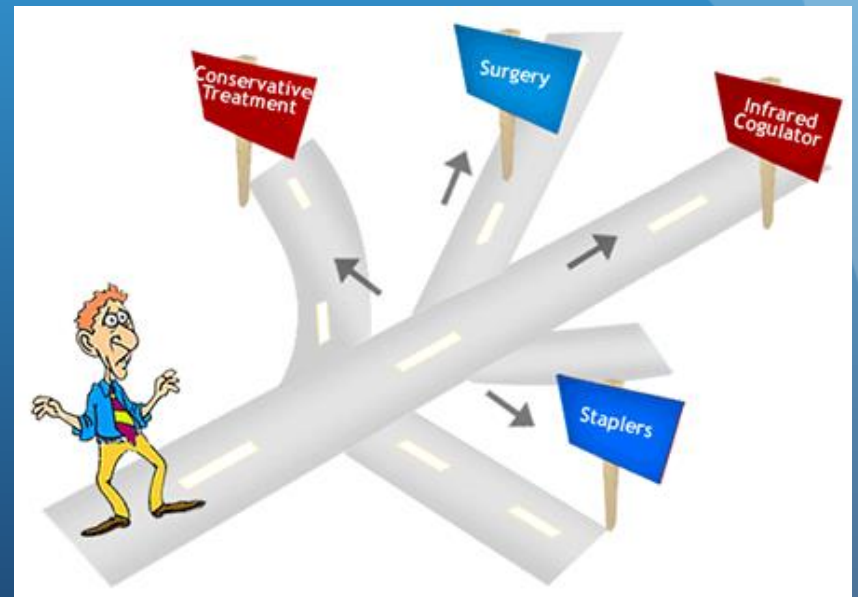
Treatment Options

Behavioral

Pharmacological

Exercises

Surgery



Self Management

- **Fluid Intake**

- Don't reduce amount
- Do not drink fluids 2 hr before bedtime
- Avoid: caffeine, alcohol, nicotine

Bladder Training

Scheduled voiding with systematic delay of voiding

- Schedule based on time interval
- Void at scheduled time even if urge not present
- Suppress urge if not time with “Quick Kegels”
- Increase voiding interval by 30 min each week until continent for up to 4 hr

Drug treatment for urgency/OAB

- Darifenacin
- Solifenacin
- Tolterodine
- Trospium

(Kegel Exercises)

Pelvic floor exercises

- Designed to strengthen the pelvic floor muscles through actively tightening and lifting them at intervals.
- Strong, well-activated pelvic floor muscles help support the bladder, uterus and bowel
- Allows urethral sphincter to function properly.

Pelvic floor muscles strengthening



Pelvic Floor Muscle Exercises

- Randomized trials for behavioral treatment
- Pelvic Floor exercises were very effective, upto 75% in reducing symptoms

Local Estrogen Therapy



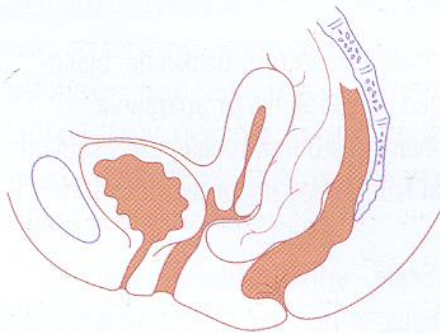
Vaginal Pessaries



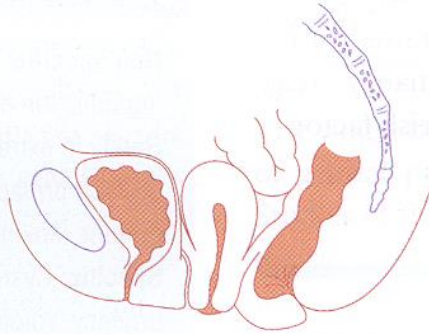
(a) Cystourethrocele



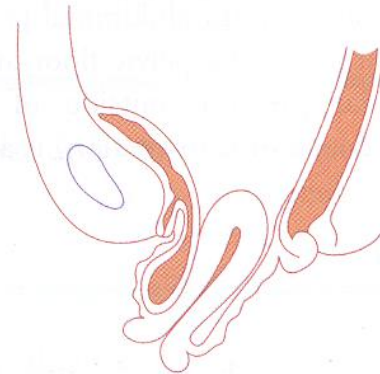
(b) Rectocele



(c) Enterocele



(d) Uterine prolapse



(e) Procidentia

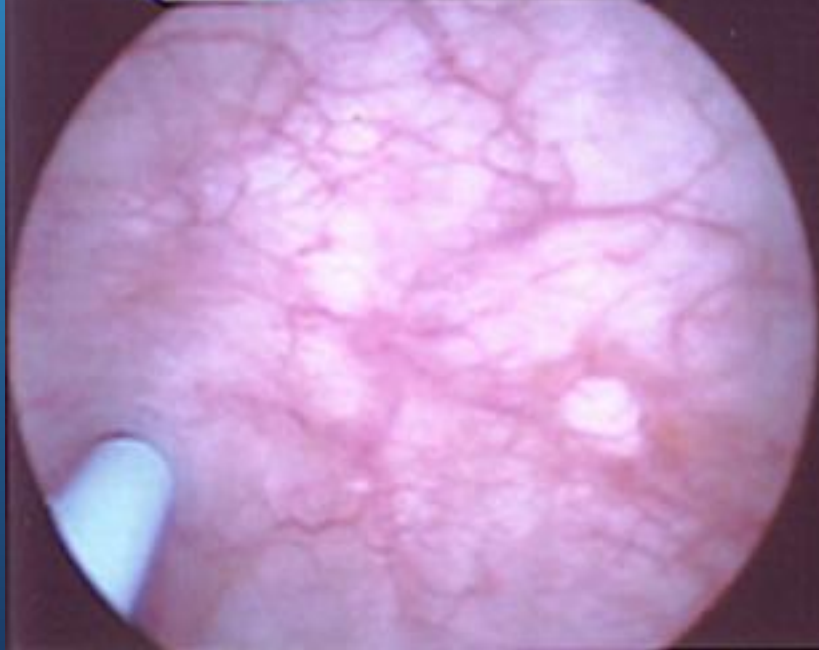
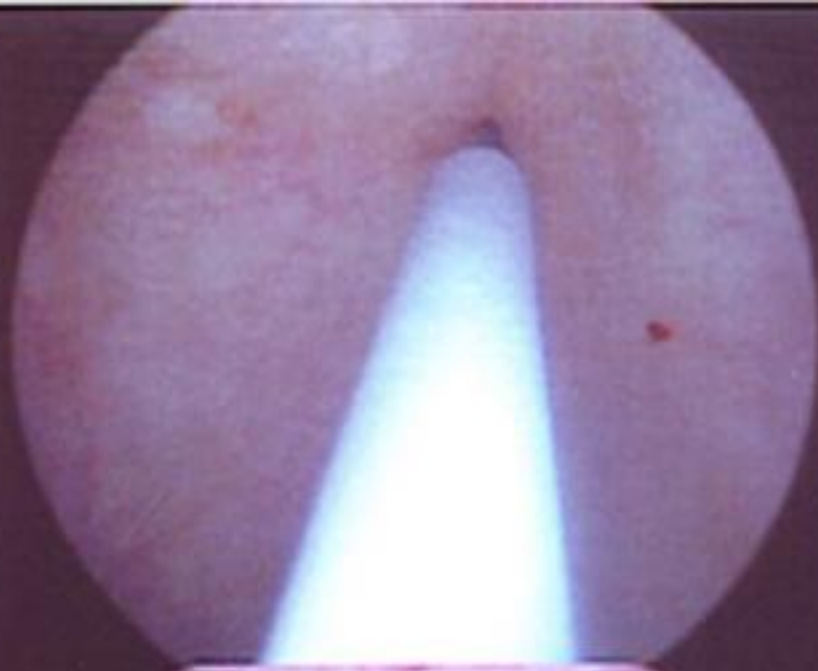
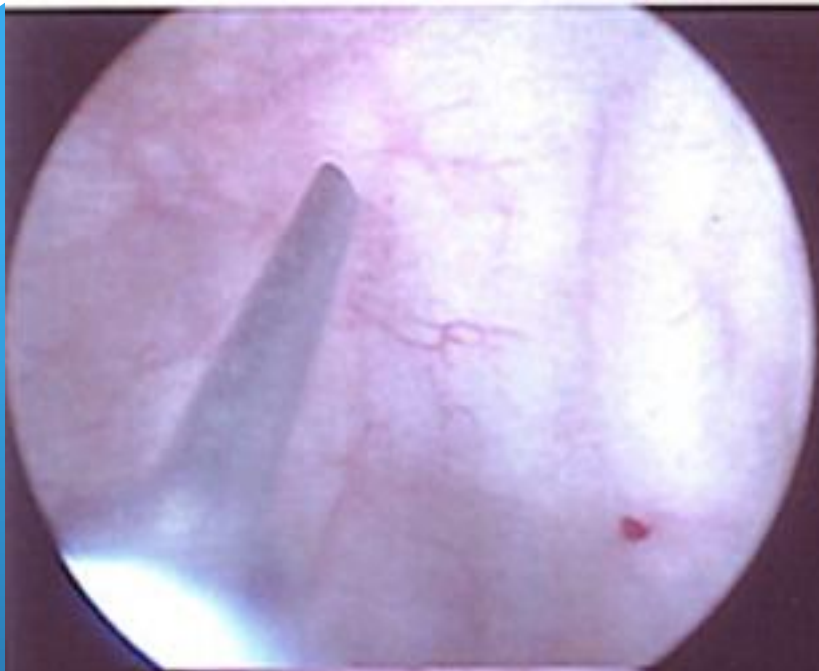
Vaginal Pessaries

- Women who have incontinence as a result of genital prolapse ,but surgery or other treatments are unsuitable.
- Help re-position the bladder and urethra, limiting the leakage of urine.
- Do not deal with the underlying cause of the incontinence.
- Can cause irritation and increase the risk of urinary infections.



Minimally invasive treatments

- **Bladder distension, urethral dilatation**
- **Botox injections to bladder wall**
- **Urethral bulking injections**



Bladder Botox Injections

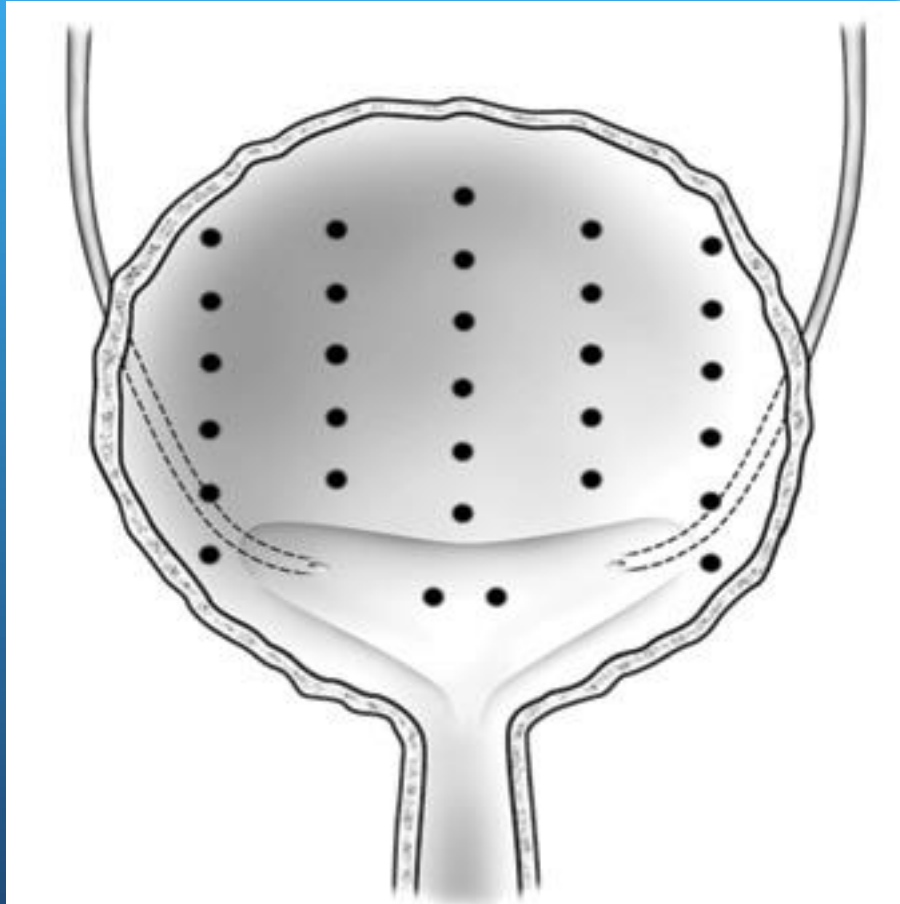
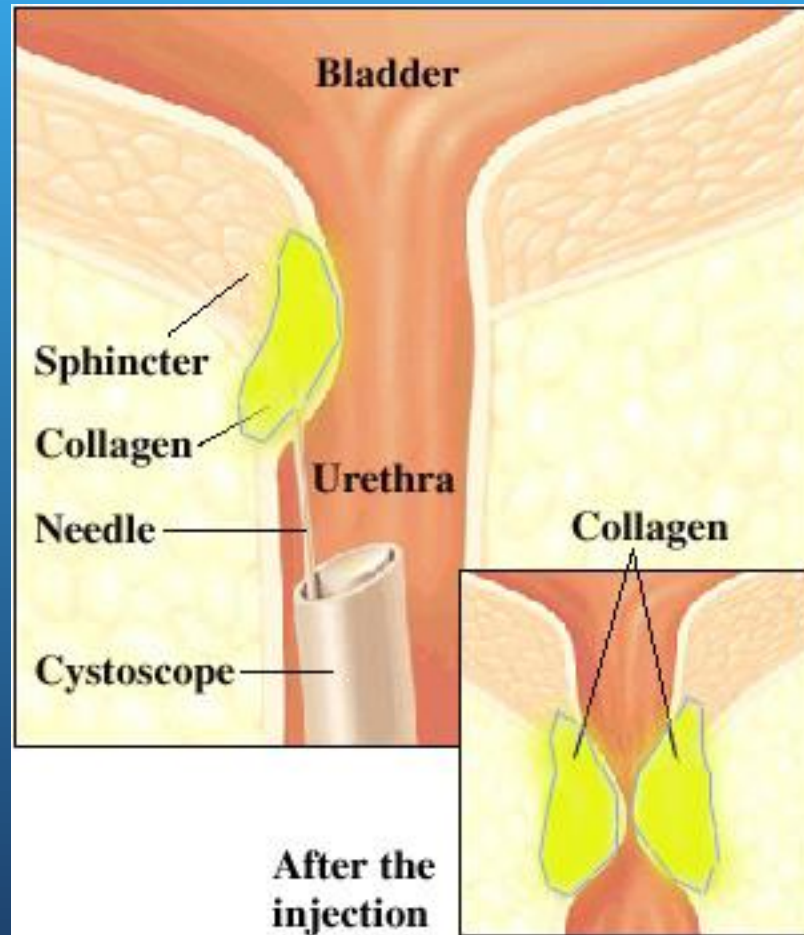


Figure 2 – University of Chicago botulinum toxin injection protocol (Reprinted with permission from Elsevier Inc, Urology, Rapp DE et al., ref. 13).

Urethral injections



Urethral injections

- Collagen, fat or synthetic materials injected into the tissues around the urethra to 'bulk up' the area & tighten the seal of the urethra.
- Urethral injections may need to be topped up and can be costly.
- Alternative to surgical treatment.

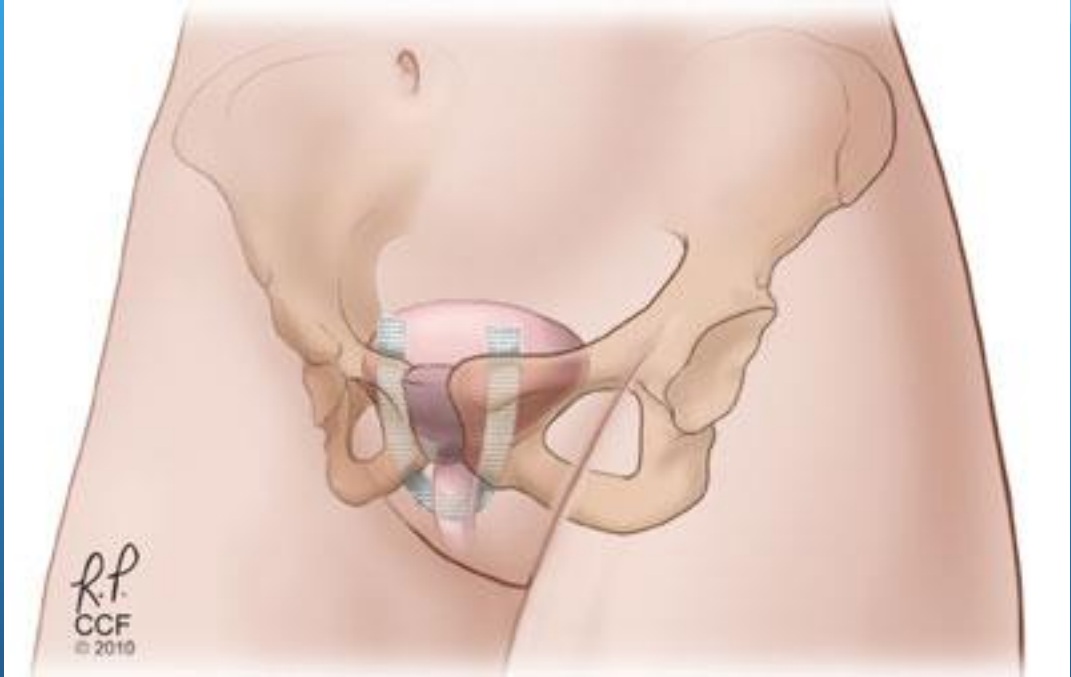
Urodynamic Assessment

- Appropriate for women who have a combination of urge & stress incontinence.
- Should always be performed before any surgical intervention is planned.

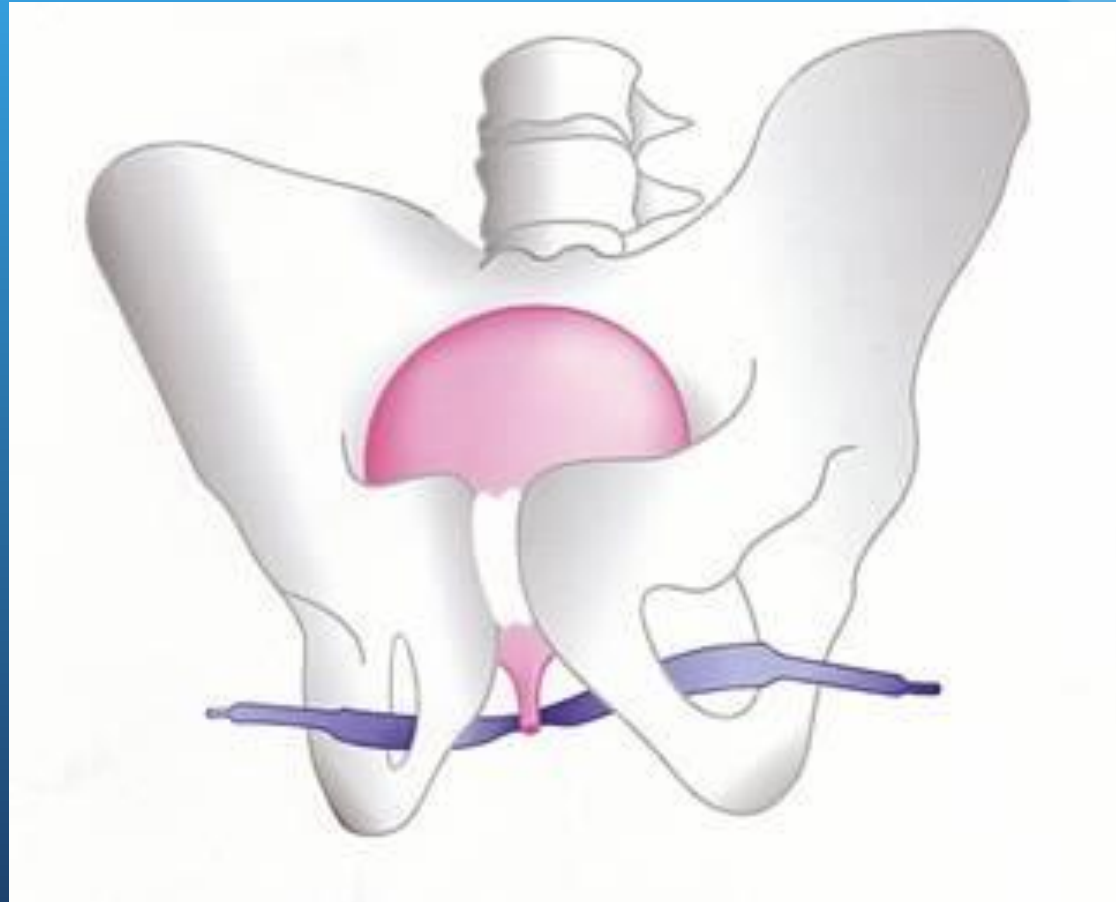


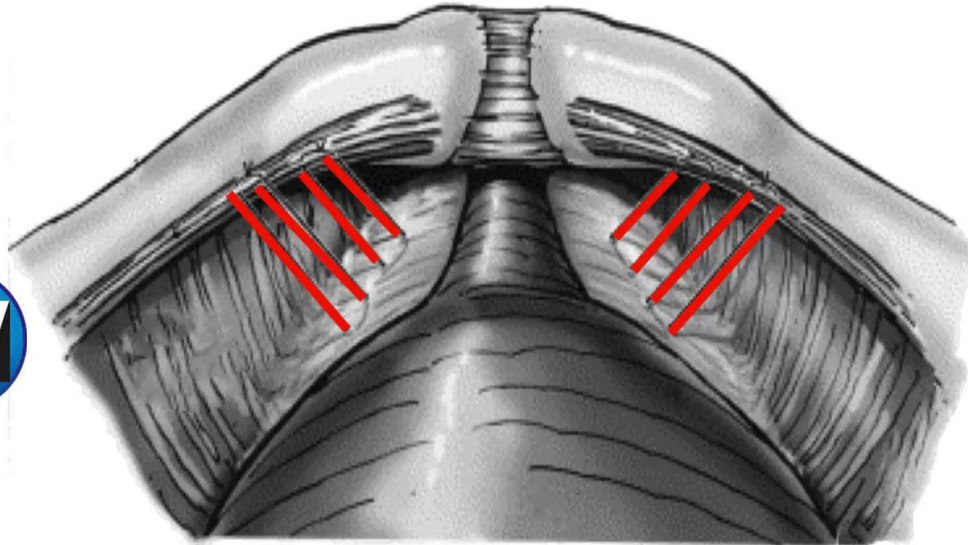
TVT0

- A piece of fascia or mesh tape is placed under the urethra like a hammock to support it.
- Out patient procedure
- Mostly under regional anaesthetic.



Trans Obturator Tape





Burch Colposuspension

www.burchcolposuspension.com

Burch Colposuspension

- Bladder neck lifted back to its proper position.
- The front wall of the vagina is lifted & stitched to strong ligaments near pubic bone.
- Abdominally or laparoscopically



incontinence



Summary

- Behavioral treatment is effective for treating stress and urge UI and OAB.
- Drugs are effective
- Minimally invasive procedures available.
- Surgery after careful evaluation.



Thank
You!