Female Urinary Incontinence & Pelvic Prolapse, "dropped bladder"

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OBJECTIVES

- Identify the various forms of Urinary Incontinence (UI)
- Understand pelvic prolapse or “dropped bladder”
- To become knowledgeable about the treatment interventions available for both urinary incontinence and pelvic prolapse
- To understand the impact of Urinary Incontinence and Pelvic Prolapse on quality of life
Definition of urinary incontinence

• Unintentional leakage of urine at inappropriate times
TYPES OF URINARY INCONTINENCE

• Urge Incontinence – Strong urge to void immediately 15%

• Stress incontinence – Increased intra-abdominal pressure that leads to incontinence 80%

• Overflow Incontinence – Over distended bladder leading to UI/dribbling

• Functional Incontinence – Physical/Psychological impairment due to inability to get to BR

• Mixed Incontinence – Combination of 2 or more types
Types of Incontinence

Overflow
- Urethral blockage
- Bladder unable to empty properly

Stress
- Relaxed pelvic floor
- Increased abdominal pressure

Urge
- Bladder oversensitivity from infection
- Neurologic disorders
Urinary Incontinence is Often Under-Diagnosed and Under-Treated

- Only 32% of primary care physicians routinely ask about incontinence
- Often not mentioned to physicians
- 50-75% of patients never describe symptoms to physicians
- 80% of urinary incontinence can be cured or improved
KEY QUESTIONS

• Are you leaking urine?
• Do you have trouble making it to the bathroom?
• Do you go to the BR frequently?
• Do you leak urine when coughing, laughing or sneezing?
• Do you wear pads for urine leakage?
• How many times do you wake up at night?
Prevalence of Urinary Incontinence

- Affects 13 million Americans
- 33% of women >65 have some degree of UI
- 26% of women >18 experience various degree of SI
- Prevalence increases with age
- 50% of those in nursing facilities

Not Normal
Economic Costs

• 10 billion $ in 1987

• Costs of UI in 1995 is 24.3 billion or $ 3,561 per incontinence person.

• 32.1 billion $ in 2000 for UI and OAB

• Cost: physical, psychological and social impact
Social and economic impact

- **Social**
  - Loss of self-esteem
  - Restriction of physical, social, sexual activities
  - Depression
  - Dependence
  - Nursing home placement

- **Economic**
  - >$16,000,000,000
Risk and Contributing Factors

- Age (NOT A PART OF NORMAL AGING PROCESS)
- Parity
- Obesity
- Vaginal delivery
- Diabetes
- Stroke
- Estrogen depletion
- Genitourinary surgery and radiation
Stress Incontinence

- Causes:
  - Loss of support of the bladder/urethra
  - Weakening of bladder valve (sphincter)
  - 80% of urinary incontinence in reproductive age women
  - With or WITHOUT a dropped bladder
1) Normal
The bladder neck is well supported and the muscle sphincter is squeezed tight shut. A rise in abdominal pressure acts evenly on squeezing the bladder and sealing the urethra - no leakage of urine.

2) Stress incontinence
The bladder neck has fallen and the muscle sphincter is strained. So a rise in abdominal pressure acts more by squeezing the bladder than sealing the urethra - urine escapes.
Treatment of Stress Incontinence

• Mild: muscle strengthening/PT
• Severe: Surgery vs. Medical Devices
• Surgery:
  • Sling
  • Bulking injection
Vaginal Slings

• Originally described in 1960’s
• Minimally Invasive
• 10-15 min procedure
• Outpatient
• 80-90% effective
• 1-3 % complications
• Considered “Gold Standard” worldwide
Vaginal Sling

- Made of MESH
- BUT is NOT transvaginal mesh used for prolapse repair
Bulking Agents

- Used to a specific group of patients who have severely weakened bladder valve (sphincter)
- Outpatient procedure
- 80% improvement
- 70% need repeat injection in 6 months
- May require self caths for days/wks
URGE INCONTINENCE

• OAB: Irritable bladder
• May have triggers
• Abrupt desire to void urine cannot be suppressed
• Associated with frequency / nocturia
• Causes- UNKNOWN, tumor, stones, MS, vaginal infection
URGE INCONTINENCE

OVERACTIVE BLADDER

Frequency

Urgency

Urge incontinence
Urge Incontinence Treatment

- Behavioral modifications (very effective)
- Medications
- Nerve stimulation
- Surgery LAST RESORT (removing the bladder or surgically increasing the size of the bladder)
Patient Education

- OAB
- Excessive fluid intake (H2O, Coffee)
- Bladder irritants
Medical Therapy for OAB/Urge Incontinence

- Very effective
- Well tolerated
- Has to be combined with behavioral modification
Nerve Stimulation for Urge Incontinence and OAB
Nerve Stimulation for Urge Incontinence and OAB
Pelvic Prolapse

• Happens when supporting structures holding the pelvic organs in place are weakened

• Protrusion of pelvic organs outside of the body

• Can involve bladder, uterus, vagina, rectum (any combination or all at once)

• Risk Factors: multiple vaginal delivery, genetics, hysterectomy, smoking, age
Epidemiology of Pelvic Prolapse

- Can affect 1 in 3 women after vaginal delivery
- 1 in 9 women have severe enough symptoms needing surgery
- About 30% need repeat surgery for failure
Symptoms of pelvic prolapse

• Feeling a heavy sensation in lower abdomen
• Difficulty emptying bladder and/or rectum
• Frequent urination
• Stress urinary incontinence
• Painful interPelvic pressure and bulge, “sitting on a ball”
• Painful intercourse
• Vaginal discharge and bleeding
• Back pain
Under-reported & under-treated

- Identified <50% of the time
- Considered normal part of aging
- Embarrassing to bring up
- Misconception regarding surgical and Non-surgical options
- Surgery involves prolonged down time, hospital stay
Complications of untreated pelvic prolapse/urinary incontinence

- Medical
  - Ulcers (skin breakdown)
  - Frequent urinary tract infections
  - Severe infection (Sepsis, kidney infection)
  - Renal failure
  - Increased mortality
Treatment of pelvic prolapse

- Mild degree, start with PT
- Medical devices
- Surgery:
  - Reducing prolapse “bladder lift”
  - Minimally invasive / outpatient
  - Laparoscopic/vaginal/robotic approaches
- Outcome affected by surgical skill and expertise
True or False

Bladder lift procedure does NOT fix urinary incontinence.

TRUE
Cystocele repair, “bladder lift”
Thank you