URINARY INCONTINENCE IN OLDER ADULTS

Goals of Presentation:
- Discuss the prevalence and significance of urinary incontinence (UI) in older adults
- Identify risk factors and common causes of UI
- Review assessment, diagnosis and treatment options related to the management of UI
- Discuss the challenges of UI in older adults with dementia
- Discuss informal caregiver supportive approaches and key factors in product selection—from a clinical perspective

Prevalence of UI in Older Adults
- About 2 million suffer from this silent epidemic
- 30 - 60% community-dwelling older women
- 10 - 35% community-dwelling older men
- Over 50% institutionalized older adults
- Prevalence increases with age and disability
  (Anger et al., 2006; Melville et al., 2005; Vaughan, et al., 2011)
Types of UI

- UI is simply defined as loss of urine of any amount (Abrams, 2002)

  - **Urge**: hits suddenly without warning, no holding time, leak on the way to the bathroom
  - **Stress**: no urgency, occurs with activity (i.e. exercise, coughing, laughing, sneezing) and more common in women.
  - **Overflow**: mechanical forces (physical movement) on an over-distended bladder (can be from Benign Prostate Hypertrophy or Diabetes)
  - **Functional**: leak as a result of functional limitations (i.e. mobility problems, arthritis, stroke)

Causes of UI

- Abnormal changes in urinary system
- Loss of mental ability
- Physical disability (immobility)
- Infection
- Uncontrolled or undiagnosed medical condition (diabetes, estrogen depletion)
- Constipation
- Side effect of medication (diuretics, anticholinergics)

(Causes Mnemonic - DIAPERS)

- Delirium
- Infection of the bladder or urethra
- Atrophic vaginitis
- Pharmaceuticals, including alcohol, caffeine and artificial sweeteners
- Excess excretion
- Restricted mobility
- Stool impaction

(Vaughan et al., 2011)
Burdens of UI in Older Adults

- Depression
- Decreased quality of life (QOL)
  - UI has a stronger influence on psychological QOL than cancer, diabetes and arthritis (Hawkins et al., 2011)
- Emotional health (isolation)
- Major indication for nursing home placement
  - The annual nursing home admissions in the US related to UI is estimated at $6 billion (Morrison, 2006)

Case Study 1 – Work Up

- 70-year-old female
- Has a strong urge to urinate and leaks on the way to the bathroom
- Leaks a little when she coughs or sneezes hard
  - What type of UI do you think she is experiencing?

UI Evaluation Should Include

- Focused History
- Physical Examination
- Functional Assessment
- Urinalysis
- Post-void residual urine volume

*Urinary Incontinence Evaluation Form
- Click on or copy and paste the link below to access the UI Evaluation Form

Focused UI History…

**Type**
- Do you leak urine during physical activity such as coughing, sneezing, lifting, or exercising?
- Do you get the urge to go and can’t make it without leaking?

**Onset & Duration**

**Severity**
- Frequency of leakage
- Need for absorbent products
- Degree of bother to the patient

**Symptom Progression**
- Better, worse, about the same?

Focused UI History…

**Lower Urinary Tracts Symptoms**
- Urgency, frequency, nocturia, dysuria, weak stream, straining to void, etc.
- AUA-7 (American Urological Association Symptom Inventory-7; a 7-item screening tool for UI) (Svatek et al., 2005)

**Constipation**

**Fluid Intake & Bladder Irritants**
- Type (caffeine, ETOH, artificial sweeteners)
- Volume
- Timing

**Previous Treatments**
- Affects on UI

Medical & Surgical History & Physical Examination

- Medical, neurological history
- Genitourinary surgeries
- Medications, including OTC
- Habits (tobacco use, ETOH)

**Brief Neurological Exam**
- Gait
- Lower extremity strength & reflexes
- Cogwheel rigidity
- Sphincter tone & voluntary

**Rectal & Pelvic Exam**
- Pelvic floor muscle strength
- Vaginal atrophy
- Prostate enlargement
- Skin
Functional Assessment

- Brief cognitive assessment (MMSE, Clock Draw, Mini-cog, MOCHA)
- ADL and IADLs (toileting dependency)
- Physical mobility (manual dexterity, history of falls)

Urinalysis and Post Void Residual

- Urinalysis to rule out infection
- Post void residual (PVR) to measure amount of urine left in bladder after voiding
  - Ultrasound or catheter
  - Acute UI or suspected retention
  - > 150-200 mL

Case Study 1 – Work Up

- 70-year old female
- Has a strong urge to urinate and leaks on the way to the bathroom.
- Leaks a little when she coughs or sneezes hard

Work up:
- Hx: No meds including OTC; drinks only water
- Physical: unremarkable
- UA: normal
- Cognition: Mini-Cognitive exam is negative
- Function: lives alone, toilets independently
- PVR: 35 mL

- Diagnosis? Mixed (Stress and Urge Incontinence)
- Treatment Options?
Treatment Options

- Pelvic floor muscle exercises (Kegels)
  - Instruction w/home practice
  - Biofeedback, electrical stimulation
- Self monitoring (bladder diaries)
- Lifestyle Changes
  - Gradual caffeine reduction/elimination
  - Weight loss
  - Fluid management
- Bladder Training
  - Medications: Antimuscarinics, Alpha-adrenergic antagonists (selective vs. non-selective), 5-alpha reductase inhibitors

Pelvic Floor Muscle Exercises (Kegels)

“When you strike…”
- Stop and stay still
- Squeeze pelvic floor muscles
- Relax rest of body
- Concentrate on suppressing urge
- Wait until the urge subsides
- Walk to bathroom at normal pace

Urge UI Suppression – “Freeze & Squeeze”

“Squeeze like you’re trying to hold back gas”
Stress UI Strategy – “Squeeze before you Sneeze”
- For stress UI squeeze pelvic floor muscles before sneezing, coughing, or lifting

UI Product Selection – Key Factors
- Gender (boxers vs. briefs)
- Volume of leakages
- Cost & budget
- Availability of products
- Timing of leakages (day vs. night)
- Mobility & function
- Quality of Life (caregiver & care-recipient)
- Maintain dignity

Case Study 2 – Product Selection
- Mr. B has a history of Parkinson’s disease and is experiencing UI
- Function and Cognition – Although Mr. B’s Parkinson’s disease is somewhat advanced he is still able (cognitively and functionally) to participate in his care and manage his leakages independently.
- Age – not a concern in this case.
- Cost – not a concern in this case.
- Pre-existing Caregiver Burden – Mr. B’s wife is experiencing significant burden in caring for him.
- Priority of Goals – managing leakages overnight.
- Etiology of Condition – abnormal changes in urinary system
- Additional Social Support – daughter
Case Study 2 – Product Selection

- The volume of leakages was important to consider because certain products are better equipped in managing certain types of leakages. Recommend the smallest or least intrusive product available that can appropriately manage the condition.
- Since Mr. B. is a male there are external urinary devices available and with the help of the nursing staff we were able to train him on applying it and caring for it himself.
- Cost & budget were not an issue for this couple, but it should always be considered.
- Dignity – Mr. B was very clear that he would not wear pads or briefs of any kind.
- After months of working with Mr. and Mrs. B, they were able to take an overnight trip to visit their daughter without incident.

When to refer to a specialist...

- Most UI can be treated by primary care providers
- Consider referral for:
  - recurrent urinary tract infections
  - post void residual > 200 mL
  - pelvic pain w/UI
  - hematuria (asymptomatic)
  - UI with new neurologic symptoms

When to refer to a specialist...

A Discussion About Dementia and Urinary Incontinence

- Nicole Davis is an Adult and Gerontological Nurse Practitioner with expertise in urinary incontinence, the needs of the aging, and using Telehealth to support family caregivers.
- Ms. Davis will talk about her experience in caring for older adults with UI and dementia and supporting family caregivers.
- Ms. Davis addresses the prevalence and challenges of UI in dementia and the key role of family caregivers.
- Click on or copy and paste the weblink below to listen to the podcast
  - [https://gsu.sharestream.net/ssdcmsi.do?u=893776aba2ac41f](https://gsu.sharestream.net/ssdcmsi.do?u=893776aba2ac41f)
Conclusion

- UI is not an inevitable part of aging
- UI is amenable to treatment in many cases and can be managed by primary care providers
- Behavioral treatments are effective options for older adults with UI
- Consider family caregiver burden and needs related to the management of UI

References