Urinary incontinence

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Success and age

- 4 - not peeing
- 12 – friends
- 17 – License
- 35 - money
- 50 – money
- 70- license
- 75 – friends
- 80 – not peeing
Outcomes

• Changes associated with ageing
• Correctable causes of incontinence
• Evaluation
• Treatment

Case presentation

• 60 yrs old female, Hpt on Rx
• Wet all time for 4 months
• History of TAH, and disc prolapse op
Evaluation

• History
  – Trauma
  – Irradiation
  – Pv bleeding
  – Parity
  – LUTS
  – Sexuality

• Exam
  – Urine in vagina?
  – Prolapse
  – Atrophy
  – Diverticula

Evaluation

• Lower tract (anatomy and functioning)
• upper tract
• Presence of infection
Male sphincter Mechanism
The normal micturition cycle

**STORAGE PHASE**

**VOIDING PHASE**

**STORAGE PHASE**

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**INCIDENCE OF INCONTINENCE**

1 in 3 women aged 55+

1 in 10 men aged 55+

Between 50 and 75 elderly patients in a practice of 2,000 patients have their social activities and contacts severely limited by incontinence.
• Urinary incontinence - not a recent medical or social phenomena. Disorders of urinary tract written in ancient times.
  – Women more willing to talk about it.
  – Improved understanding of the diverse pathophysiology of incontinence.
  – Advent of new treatment.
  – Development of urology & urogynaecology as a specialty.

Continence?

• recognize the need
• identify the correct place
• hold on until he/she reaches the correct place
• reach the correct place
• pass urine when he/she gets there
• Urinary Incontinence - involuntary loss of urine which is objectively demonstrable & is a social and hygienic problem.

Continence

• Depends on
  – Mobility
  – Mentation
  – Manual dexterity
  – Intact lower urinary tract function
How does incontinence occur

- Bladder factors:
  - underactive detrusor
  - detrusor/sphincter dyssynergia
  - unstable detrusor

- Urethral Factors
  - incompetent urethral closure
  - weakness of pelvic floor muscles
  - urethral obstruction
  - overactive urethral closure

- Factors affecting our ability to cope with the bladder:
  - impaired mental function
  - other psychological factors
  - mobility and dexterity problems
  - environmental problems
  - drug treatment
Incidence

• 15-30% at home
• 1/3 in acute care setting
• ½ in long term institutions
Consequences

• Medically
  – Perineal rashes
  – Pressure sores
  – UTI’S
  – Falls and fractures
• Economically

• Psychologically
  – Embarrassment
  – Stigmatization
  – Isolation
  – depression

Stress urinary incontinence
Risk factors for SUI

• Increasing parity, probably related to obstetrical trauma
• 2 Increased intra-abdominal pressure
  a medical factors (eg smoking, chronic bronchitis or other pulmonary problems, constipation with chronic straining at stool, obesity (??))
  b environmental factors (eg jobs requiring heavy lifting or straining)
• 3 Pelvic floor trauma and denervation injury
  a obstetric trauma
  b nonobstetric trauma (eg pelvic fractures and radical surgery)
• 4 Hormonal status and estrogen deficiency
• 5 Connective tissue disorders

Changes ass with ageing

• Cormobid ds
• Nocturia
• Sleep disorders
• Bladder
  – Capacity
  – Contractility
  – Ability to postpone voiding
  – Involuntary bladder contractions
Transient causes ‘DIAPPERS’

- Delirium
- Infection
- Atrophy
- Pharmacological
- Psychological
- Excessive urine output
- Restricted mobility
- Stool impaction

DRUGS

- Sedative hypnotics
  - Benzodiazepines
  - Alcohol
- Diuretics
- Anticholinergic agents
  - Antihistamines
  - Antidepressants
  - Antipsychotics
  - Antispasmodics
  - Anti-Parkinsonian agents
- Andrenergic agents
  - Sympathomimetics
  - Sympatholytics (Prazosin)
- Calcium channel blockers
Risk of incontinence

- Abdominoperineal resection 10%-44%
- Radical hysterectomy 7%-80%
- Polio (almost always recovers) 4%-42%
- Diabetic neuropathy 2%-83%
- Lumbar disc disease 6%-18%
- Multiple sclerosis
  - Presenting symptom 2%-12%
  - Overall incidence 33%-78%
- Parkinsonism 37%-70%
- Stroke 34%-53%
- Meningomyelocele 97%

Evaluation

- Patient history. Frequency, nocturia, urgency, urge incontinence, stress incontinence, voiding patterns, drinking habits, drugs, medical problems, quality of life. Frequently female pts present with mixed incontinence.
- Physical examination: general, abdominal, pelvic - atrophic vaginitis, uterine descent, vaginal wall prolapse, pelvic muscle strength, S234.sonar.
- Frequency/volume chart: intake, output, episodes of dampness, leaking, acts as a teaching aid.
- Urine examination
- Urodynamics
Evaluation

- History
- Physical examination
- Investigations
  - Voiding diary
  - Urinalysis & blood U&E
  - Sonar
  - Other

Aging- effect

- In men
  - Prostate enlarges
- Urethra in women
  - Length
  - Closing pressure
Treatment goals

- Continence
- Preserve upper tracts –
  - Prevention & early treatment of infections

Established causes

- Urinary tract causes
  - Bladder
    - Overactivity
    - Underactivity
    - Urethral resistance
    - Urethral obstruction
treatment

- Overactive bladder
  - Behavioral
  - Drugs (anticholinergics)
  - Adjunctive measures (pads, condom/indwelling catheters-complications)
  - Other – botox, neuromodulation

Underactive bladder

- High PVR
- Intermittent catheterisation
Stress incontinence

• Pelvic muscle exercise
• Pharmacological
• Surgical
  – bulking agents
  – Sling
  – AUS

Approach

• Outlet
  – Pharmacological- Alpha blockers
  – surgical