Clinical Evaluation of Female Lower Urinary Tract Symptoms (F – LUTS)

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Changing life style
QoL
"Would you stop leaving incontinence leaflets lying about! I've told you, I don't have a problem!"
Impact on quality of Life (QoL)
Female - LUTS

- Causes
- Terminology
- Clinical assessment
- Investigations
F- LUTS
Causes
Causes of Female LUTS

- Urinary tract infection
- Renal stones
- Various types of urinary incontinence
- Urethral stricture
- Urological cancer
Types of urinary incontinence

- Urodynamic Stress Incontinence (USI)
- Detrusor Overactivity Incontinence (DOI)
- Mixed Urodynamic Incontinence (MUI)
- Overflow incontinence
- Urogenital fistulae
- Congenital (ectopic ureter)
- Urethral diverticulum
- UTI
- Medications
- Functional (e.g. immobility)
F-LUTS Terminology
Storage symptoms

- **Urinary incontinence**
  The complaint of any involuntary leakage of urine

- **Urgency**
  Sudden compelling desire to pass urine, which is difficult to defer

- **Increased daytime frequency**
  The complaint by the patient that he/she voids too often by day

- **Nocturia**
  The complaint that the patient has to wake up at night one or more times to void

- **Nocturnal enuresis**
  The complaint of loss of urine occurring during sleep
Storage symptoms

• **Urge urinary incontinence (UUI)**
  Involuntary leakage accompanied by or immediately preceded by urgency

• **Stress urinary incontinence (SUI)**
  Observation of involuntary leakage from the urethra, synchronous with exertion / effort, sneezing or coughing

• **Mixed urinary incontinence (MUI)**
  Involuntary leakage associated with urgency and also with exertion, effort, sneezing or coughing
Storage symptoms

• **Continuous urinary incontinence**
  Complaint of continuous leakage day and night

• **Other types of incontinence**
  - Incontinence intercourse
  - Postural incontinence
Overactive Bladder (OAB)

Urgency, with or without urge incontinence, usually with frequency and nocturia

Also known as:

- Overactive bladder syndrome
- Urge syndrome
- Urgency-frequency syndrome
Voiding symptoms

- **Slow stream**
  Perception of reduced urine flow, usually compared to previous performance or in comparison to others

- **Intermittent stream (intermittency)**
  Describes urine flow which stops and starts, on one or more occasions, during micturition

- **Hesitancy**
  Difficulty in initiating micturition resulting in a delay in the onset of voiding after the individual is ready to pass urine

- **Straining to void**
  Describes the muscular effort used to initiate, maintain or improve the urinary stream
Post-micturition symptoms

Experienced immediately after micturition

• Feeling of incomplete emptying
  Self-explanatory term for a feeling experienced by the individual after passing urine

• Post-micturition dribble
  Describes the involuntary loss of urine immediately after finishing passing urine, usually after rising from the toilet
F- LUTS
Clinical assessment
Clinical evaluation
History

- Details of the presenting symptoms
- Symptoms: characterized and quantified
- When more than one symptom is present, which is the most bothersome
- Bladder diary
- For incontinence, a pad test
Past medical history

• Known neurologic diseases
  MS, spinal cord injury, lumbar disk prolapse, CVA Parkinson’s
• If no history of neurologic diseases, ask about:
  Double vision, muscular weakness, paralysis or poor coordination, tremor, numbness
• History of vaginal surgery
• Abdomino-perineal resection, radical hysterectomy
• Radiotherapy
  Small capacity, low compliance, radiation cystitis
Medication history

Medications may cause LUTS

- **Alpha-adrenergic agonists:**
  Urethral obstruction and urinary retention
- **Alpha adrenergic antagonists:**
  SUI
- **Tricyclic anti-depressants:**
  Bladder outlet obstruction
- **Narcotic analgesics and anti-histamines:**
  Impaired detrusor contractility that can urinary retention
- **Parasympathomimetics (bethanechol):**
  Involuntary detrusor contractions, bladder pain
Abdominal and Pelvic examination
Physical examination

Detecting anatomic and neurologic abnormalities that contribute to LUTS

Neurological examination:
  • Gait, abnormal speech, facial asymmetry……

Abdomen
  • Masses, hernias, distended bladder

Sacral innervation (S2, S3, S4)
  • Anal sphincter tone, genital sensation
Physical examination

Vaginal examination

• Atrophy
• Urethral caruncle
• Urethral mucosal prolapse
• POP