INCONTINENCE

Four clinical types (all of which can overlap)

**Urge:** Leakage associated with uncontrollable urge to urinate

**Stress:** Leakage with sudden increase in intra-abdominal pressure

**Overflow:** Associated with distended bladder

**Functional:** inability or unwillingness to use toilet or collection device

**OVERFLOW** Least common but must be ruled out in all incontinence by determination of residual urine

**Etiology:**
- Outlet obstruction
- Neurologic
  - Lower cord lesion: trauma, disc, spondylosis, tumor etc.
  - Peripheral neuropathy: Diabetes
  - Multiple sclerosis (hyper or hyporeflexia and/or DS dysynergia)
- Pharmacologic
  - Bladder: anticholinergics
  - Outlet: alpha adrenergic agonists
- Fecal impaction
- Immobilization

**URGE** “Detrusor instability” or hyper-reflexia Bladder contraction without owner’s permission

**Etiology:**
- Neurologic
  - Upper cord or intracranial lesion (loss of inhibition)
  - Multiple Sclerosis
  - Occasionally peripheral neuropathy
- Local Bladder
  - Infection/inflammation
  - Cystocele
  - Stress incontinence!!
- Aging
- Pelvic or urethral surgery
- IDIOPATHIC ***

**Diagnosis**
- History, including bladder diary
- Urodynamics (cystometrogram)
- +/- cystoscopy to look for local bladder problem

**Treatment**
- Anticholinergics
- Tricyclic antidepressants
- Interstim

**STRESS**

**Etiology**
1. Loss of pelvic support (bladder neck hypermobility)
2. Loss of elasticity & coaptation in urethra (ISD= intrinsic sphincter deficiency)
   These can occur independently or together

**Evaluation**

PE - hypermobility of vesical neck (cystocele) Q-tip test to confirm
- Stress test- prevention of leakage by support of vesical neck

Cystoscopy esp. in ISD to visualize lack of coaptation

Cystometrogram for leak point pressure, also hyper-reflexia if urge incontinence present also. “Mixed” incontinence is stress and urge. Urge may or may not be caused by stress but often is. Urge resolves with correction of stress in 75%. Always try to treat urgency before surgery for stress incontinence.

**Treatment** for stress incontinence is surgical. Bladder neck suspension or pubovaginal sling