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URINARY INCONTINENCE

Definition:-

- It is defined as involuntary or uncontrolled of urine from the bladder sufficient to cause a social or hygienic problem.

Incidence:-

- Prevalence increases with age (but it is not a part of normal aging)
- 25-30% of community dwelling older women
- 10-15% of community dwelling older men
- 80% of urinary incontinence can be cured or improved

Anatomy :-

- Detrusor muscle
- External and Internal sphincter
- Normal capacity 300-600ml
- First urge to void 150-300ml
- CNS control
  - Pons - facilitates
  - Cerebral cortex – inhibits

Cause:-

D - Delirium
I - Infection
A - Atrophic vaginitis or urethritis
P - Pharmaceuticals
P - Psychological disorders
E - Endocrine disorders
R - Restricted mobility
S - Stool impaction

- **Medications That May Cause Incontinence**

  Diuretics
  Anticholinergics - antihistamines, antipsychotics, antidepressants
  Seditives/hypnotics
  Alcohol
  Narcotics
  α-adrenergic agonists/antagnists
  Calcium channel blockers

Risk factor:-

- Pregnancy eg. Vaginal delivery, Episiotomy
- Menopause
- Genitourinary surgery
- Pelvic muscle weakness
- Immobility
- High impact exercise
- Stroke

- Age related change in urinary tract
- Obesity
- Toilet unavailable

TYPES:-

- Stress incontinence
- Urge incontinence
- Reflex incontinence
- Overflow incontinence
- Incontinence after trauma or surgery

Diagnostic Evaluation

- History
- Physical examination
- Cystomyogram
- Electromyogram
- Cystoscopy
- IVP

- Post-void residual
- Blood Tests (calcium, glucose, BUN, Cr)
- Urine Culture

Management:-

In three categories:-

- Behavioural
- Pharmacological
- Surgical

Behavioural:-

- Bladder training
  - Patient education
  - Scheduled voiding
  - Positive reinforcement
- Pelvic floor exercises (Kegel Exercises)
- Biofeedback
- Caregiver interventions
  - Scheduled toileting
  - Habit training
  - Prompted voiding

Pharmacological:-

1. Oestrogen (Dec. obstruction of urine flow by restoring the mucosal, vascular & muscular integrity of urethra)

   eg. quinstrediol & estrol (orally, I/D)

2. Anticholinergic agents (Dec. Spasticity of bladder, inhibit bladder contraction)

   eg. Oxybutynine

3. Alpha adrenergic blocker (Reduce Spasticity of bladder neck)

   eg. Prazocine, phenoxybenzamine

4. Calcium channel blocker (Reduce destrusor contraction)

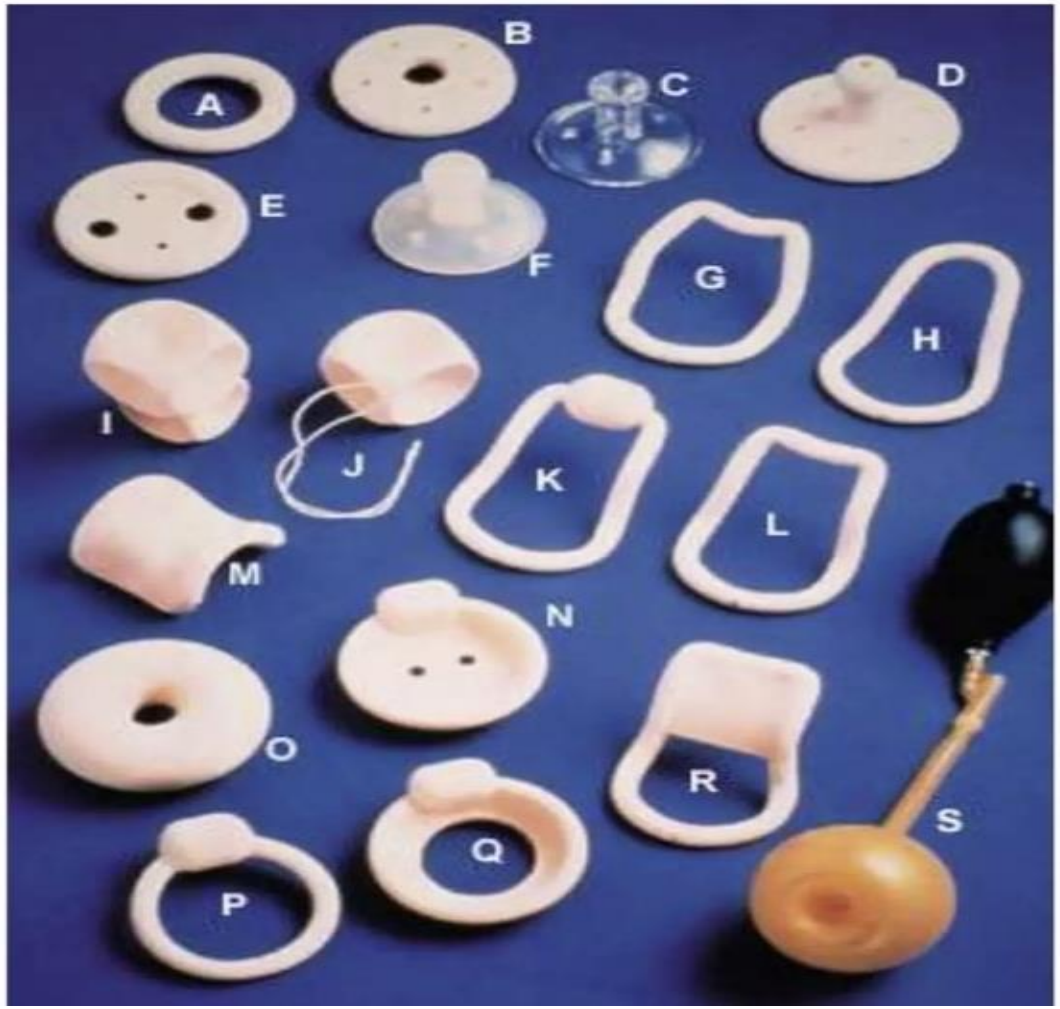
   eg. Nifidipin

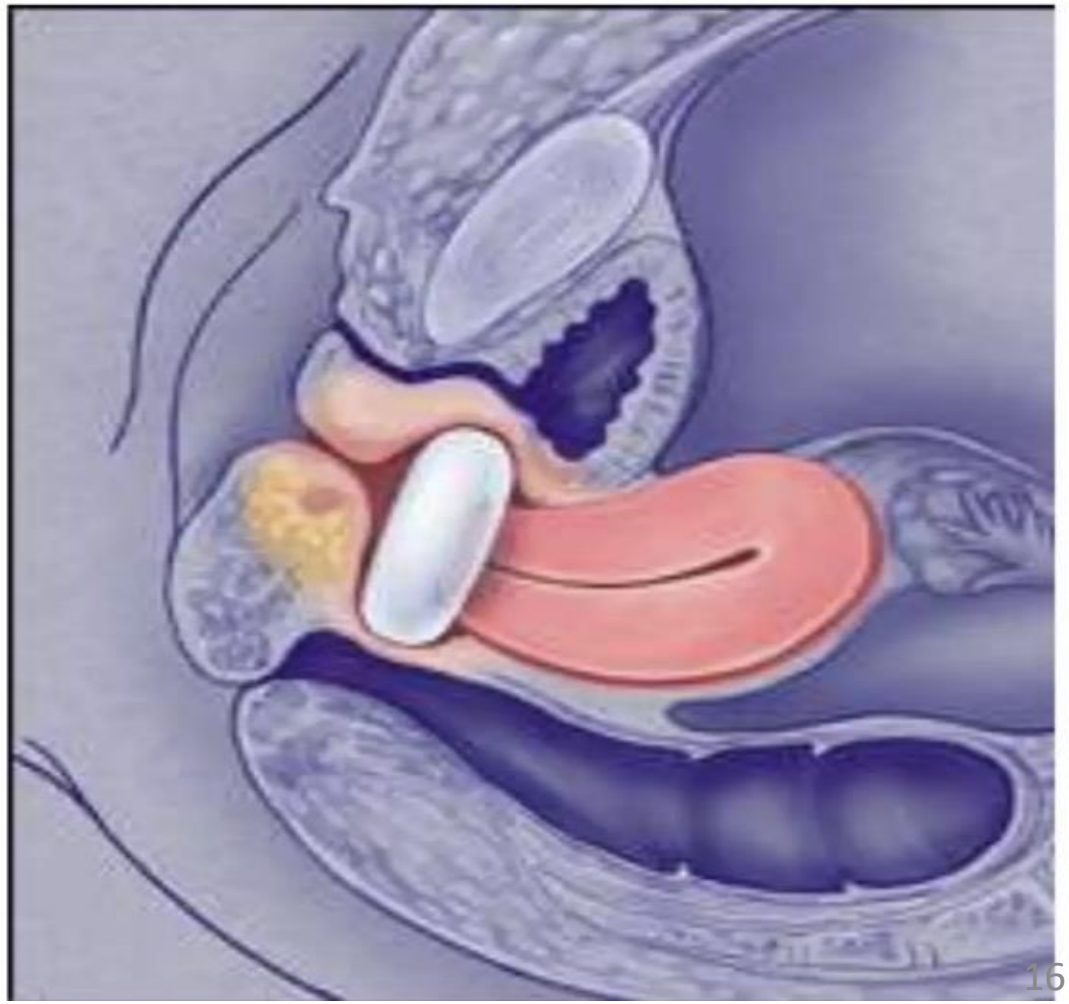
Surgical:-

- Lifting & stabilizing the bladder or urethra to restore the normal urethra vesicle angle or lengthen the urethra.
- Periurethral bulking agents (periurethral injection of collagen, fat or silicone)
- Diapers or pads
- Chronic catheterization
  - Periurethral or suprapubic
  - Indwelling or intermittent
- Pessaries

Indwelling Catheter

Pessaries





Strategies for managing UI:-

- Increase our awareness of the amount, timing of all fluid intake.
- Reduce amount and timing of fluid intake.
- Avoid bladder stimulants (caffeine).
- Avoiding taking diuretics after 4pm.
- Reduce physical barriers to toilet (use bedside commode).
- Avoid constipation.
- Void regularly 5 to 8 times a day.
- Perform all pelvic floor exercise.
- Stop smoking.

Nursing management:-

- Encourage the pt for voiding urine in proper interval.
- Provide support.
- Teach regarding bladder function.
- Teach pt use daily dairy to record timing of kegel exercise.
- Explain the action & side effect of drugs.
- Follow up treatment.

Complication:-

- Social stigmata - leads to restricted activities and depression
- Medical complications - skin breakdown, increased urinary tract infections
- Institutionalization - UI is the second leading cause of nursing home placement

با تشکر از توجه شما