AN APPROACH TO URINARY INCONTINENCE IN THE ELDERLY
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DEFINITION
Urinary incontinence is defined as the involuntary leakage of urine. Its prevalence amongst elderly in the community is 5%, hospitals is 30% and nursing homes 50%.

HISTORY
Look out for these symptoms:
1. Frequency
2. Urgency
3. Dysuria
4. Leaking urine on coughing or straining
5. Diapers
6. Incontinent episodes.
Ask the patient if he:
1. Has sensation of passing urine
2. Able to control the urine
3. Wet on coughing or straining
4. Frequency of voiding
5. Impact of symptoms on daily living
6. Medication history
7. Bowel habits (constipation)
8. Psychological and functional state.

EXAMINATION
It would be routine to check for the following:
1. Skin condition around groin
2. Abnormal external genitalia
3. Abdominal examination – palpable bladder, constipation
4. PR – anal tone, prostate, stools, perineal sensation
5. PV – in presence of UV prolapse

MANAGEMENT
Always exclude:
Environmental causes like unfamiliar places, inaccessibility to toilets, lack of privacy and negative attitudes of carers (where incontinence is taken as part of normal aging).
Exclude DIAPPERS causes which would include:
D – Dementia, Delirium
I – Infection [UTI]
A – Atrophic vaginitis
P – Pharmacological/drugs
P – Psychological-depression
E – Endocrine like DM, DI, hypercalcaemia
R – Restricted mobility due to disease or restraining
S – Stool impaction
Treat all reversible causes above (if any) and review patient again for persistent symptoms.

STRESS
This is leakage of urine due to effort or exertion.
Pelvic floor exercise should be taught. The patient is asked to contract the pelvic muscles like when holding urine or motion to a count of 10. This is done 10 times each session over 3 sessions a day. Results can be seen after 6-8 weeks.
Treat atrophic vaginitis if present. Exclude UV prolapse and refer to O & G if necessary. Surgery and collagen injections would be an option in certain cases.

FUNCTIONAL
Physical
The patient is incontinent due to physical disability. Refer for physiotherapy, prescribe appropriate aids and appliances. The patient could use a urinal or bedside commode until he improves physically.
Mental
The patient has cognitive impairment resulting in incontinence. Look for the cause of the cognitive change and treat reversible causes.
If it is established dementia, regular potting of the patient at 2-3 hour intervals can keep the patient continent. This would need a motivated carer.

Urge
This is due to unstable bladder or detrusor instability. The patient would have symptoms of urgency, small capacity bladder, sensation to passing urine (PU) is intact with a low post-void residual urine (RU).
The key to management would be bladder training. This could be thought in your clinic. Several methods are available and choose one that is suitable for your patient.

Options include:
Mandatory schedule
Patient is given a voiding schedule. The timings are based on the baseline assessment, generally one to two hourly. The patient must be told not to go to toilet until the next appointed time even if she has to be incontinent. The results will be recorded on a bladder chart. When the patient is successful at remaining dry, the interval is increased gradually by 15-30mins.

Self schedule
This follows the same principle as mandatory, but this allows the patient to go if she can’t hold her urine till the next appointed time. The patient would gradually increase the interval and chart her progress. Results may be seen after 3 months.

Drugs
Bladder training should be complemented by drug treatment if there are no contraindications. The preferred drugs that could be used would include an anticholinergics like oxybutynin. Start at 2.5mg bd and increase slowly up to 5-10mg tds.
Look out for complications like constipation, postural hypotension and urinary retention and confusion.

OVERFLOW
There will be symptoms of frequency, no sensation of PU, large capacity bladder and high RU.
Priority would be to empty the bladder by inserting indwelling catheter (IDC) or teaching IMC [intermittent catheterisation] to a motivated carer. Exclude UTI, constipation, neurological problems like cord compression and DM neuropathy and prostate problems in men. Drugs that could be used would include bethanechol. Refer to a urologist for urodynamic study.

Questions
1. Routine investigation for an elderly patient with incontinence would include:
   a. AXR
   b. UFEME
   c. Urine culture
   d. Bladder scan to measure RU
   e. Urodynamics study.
2. Management of urge incontinence would include:
   a. Bladder training
   b. Regular potting
   c. Anticholinergics
   d. Cholinergics
   e. Surgery.
3. Urge incontinence could be caused by:
   a. UTI
   b. Constipation
   c. BPH
   d. CVA
   e. Cervical myelopathy
   f. All of the above.
Incontinence Evaluation [Summary]

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<tbody>
<tr>
<td>Sensation to PU</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Ability to control PU-urge</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Wet on coughing/straining</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Frequency of voiding</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Palpable bladder</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>High post void RU</td>
<td>Normal</td>
<td>Normal</td>
<td>Normal</td>
<td>High</td>
<td>Normal</td>
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Summary

- Identify sufferer
- Evaluation through history/examination and investigations
- Improve environmental factors
- Exclude DIAPERS and treat if present
- Cured
- Persistent [priority is to exclude overflow]
  - Check for post void RU
    - [done by in-out catheterisation/bladder scan]
    - High RU [>150 mls]
    - Normal [<150 mls]
    - IDC/IMC
    - Look for causes
      - PFE/drugs
      - Stress Bladder training/drugs
    - Refer for urodynamics
      - Failed
- Detrusor underactivity IMC/IDC
- Outlet obstruction Surgery

Bladder Chart

Instructions:
1. Record time and quantity of fluids [to include type] each time you take in.
2. Record the time and quantity of urine each time you passed.
3. If the amount of fluid or urine is unknown, put a tick.
4. In remarks, record the event that may explain the wetting or discrepancy in the charting e.g., urine spilled, passed in toilet, used diapers, etc.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Intake [mls]</th>
<th>Time</th>
<th>Amount voided [mls]</th>
<th>Remarks [to include incontinent episodes]</th>
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