Assessment and Management of Urinary Incontinence in the Stroke Unit

Urinary incontinence may affect 40-60% of people admitted to hospital after a stroke. About 25% still have problems at discharge from hospital and 15% remain incontinent at one year. Structured assessment and appropriate management of care reduces the number of people with long term urinary incontinence.

Factors increasing risk of post stroke urinary incontinence.

- Immobility
- Loss of volitional control through cognitive issues, agnosia, dementia, delirium etc.
- Pre-morbid incontinence.
- Neurogenic factors
  - Sphincter dysfunction, disinhibition.
  - Uninhibited bladder contraction.
  - Atonic bladder.
- Structural factors, pelvic floor weakness, cystocele, rectocele.
- Urinary tract infection.
- Constipation and impaction.
- Medications & Drugs
  - Diuretics
  - Anticholinergic agents.
  - Sedatives.
  - Caffeine

Principles of initial management

- **Avoid urinary catheterisation** unless in persistent urinary retention or at serious hazard to pressure areas urinary catheterisation significantly increases risk of urinary tract infection.
- Use specific pads made for urine loss and change regularly.
- Night time briefs
- Use unscented, mild soap to clean
- Physiotherapy management of stress incontinence and urinary urge incontinence/overactive bladder post stroke or neurogenic bladder
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**Urge Incontinence (Overactive Bladder)**

Common following stroke especially frontal stroke (voluntary control of external sphincter but uninhibited bladder contraction). Worsened by infection, constipation and functional factors (immobility, cognitive impairment).

**Investigation:** Detailed history and examination, MSU, out-rule infection constipation/ faecal impaction. Bladder U/S small volume urine post voiding. Urodynamics: early and increased detrusor activity.

**Treatment**

- Review medications
- Review fluid intake (maintain euvolemia but reduce volume in evenings)
- Urge suppression strategies
- Timed voiding (toilet chart with fixed schedule)
- Prompted voiding (patient offered assistance regularly).
- Use of anticholinergics with caution (poor evidence following stroke).

**Overflow Incontinence (Underactive Bladder).**

In overflow incontinence the bladder is full or nearly full at all times and therefore leaks when more urine enters. It can be due to atonic bladder or incoordination between detrusor and sphincter (simultaneous contraction). Ureteric reflux and kidney damage may result. May be worsened by Prostatic Hyperplasia or other obstruction e.g. Faecal impaction.

**Investigation:** Detailed history and examination, MSU, PR examination out rule faecal impaction and prostate enlargement. U/S large volume of urine post voiding.

**Treatment:**

- Catheterisation may be unavoidable, early removal or intermittent catheterisation may be of benefit.
- Avoid anticholinergic medications.
- Consider alpha blockers for BPH, pessaries for cystocele.
Functional Incontinence (Normal Bladder)

Functional Incontinence results from barriers that prevent the person voiding appropriately and in time e.g. Impaired cognitive functioning, impaired mobility.

Treatment:

- OT assessment for toileting aids and training to use same.
- Availability of regular assistance to use bathroom etc.

Stress Incontinence (Bladder outflow problem)

Stress Incontinence is rare de-novo following stroke but common in older women who have suffered a stroke (and in men post radical prostatectomy) and exacerbated by functional factors. Treated with pelvic floor exercises, vaginal pessaries and occasionally surgery. Consider early involvement of gynaecologists.

References:


Approval Date: October 2016
Review Date: October 2018
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