





8.6 BLADDER CARE

INTRODUCTION

Urinary symptoms, secondary to malignancy, concurrent systemic diseases, medications or specific treatment such as surgery, chemotherapy or radiotherapy, are seen in palliative care patients.

Common urinary problems encountered in palliative care patients are:

• Urinary incontinence - loss of urinary bladder control leading to urine leak

Transient incontinence

Delirium, constipation/faecal impaction, urinary tract infections, medication, restricted mobility

Chronic incontinence

- Stress incontinence incontinence due to increase in intra-abdominal pressure (cough, sneeze or any physical exertion)
- Urge incontinence detrusor muscle instability, inflammation of the urinary bladder secondary to tumour mass, medications, or infection
- Overflow incontinence urinary bladder is full and there is inability to fully empty the bladder and leads to leak. Can occur due to detrusor muscle instability either because of neurological damage, medications or because of urinary bladder outflow obstruction secondary to tumour, stricture or prostatic hyperplasia
- ➤ Total incontinence continuous total loss of control of urine due to loss of sphincter control secondary to primary or secondary spine lesions, traumatic spinal cord injuries and neurological disorders such as multiple sclerosis
- > Functional incontinence inability to hold urine till one reaches the toilet due to functional disability
- **Urinary stasis/retention** inability to voluntarily void urine. The causes are:
 - ➤ Bladder outlet obstruction malignancy of lower urinary tract, constipation leading to a loaded rectum causing acute urinary retention
 - Impaired contraction of detrusor muscle
 - damage to detrusor muscle radiotherapy, long term obstruction
 - primary or secondary spine lesions, multiple sclerosis, traumatic spinal injuries







- Bladder spasm painful contraction of the bladder due to contraction of an overactive detrusor muscle against partial or complete bladder outlet obstruction. The causes are:
 - > Bladder outlet obstruction secondary to malignancy of the lower urinary tract
 - Foreign body such as stent, catheter etc.
 - Instillation of irritants into the urinary bladder
- **Haematuria** passing of blood or clots in urine. The causes are:
 - Malignancy of the urinary tract
 - Pelvic irradiation or chemotherapy
 - Coagulation disorders

ASSESSMENT

- Assessment must determine the underlying cause of urinary problems, effectiveness of treatment and impact on quality of life for the patient and their family (refer to the Guideline - Symptom Assessment)
- Assess for daytime frequency of micturition, urine output, nocturia, urgency, and feeling of incomplete voiding of urine
- Assess for urinary incontinence, retention and obstruction
- Assess for haematuria, urinary tract infection, bladder spasms
- Assess for pain, constipation, delirium, restricted mobility
- Assess current medications antidepressants, sedatives, opioids
- Assess for lymphoedema of the lower limbs
- Assess the urinary catheter for sedimentation, encrustation, block
- Investigations (if appropriate) urine routine, urine culture and sensitivity, ultrasonogram of the urinary bladder (when necessary to look for post void residual urine, presence of clots)

RECOMMENDATIONS

- Care should be directed to maintain comfort, dignity and relieving symptoms
- Provide privacy to the patient by using bedside curtains and/or leaving the patient alone while using a commode







- Clean intermittent catheterisation (CIC) is preferred over indwelling catheter as long-term use of indwelling catheter carries higher risk of urinary tract infection, urethral erosion, irritant bladder symptoms and other urinary tract problems
- Suprapubic catheter is preferred, if CIC is not appropriate
- Treatment with antibiotics is indicated in patients with symptomatic catheter associated urinary tract infection (CAUTI)
- Consider prophylactic antibiotics to prevent CAUTI in patients with history of recurrent CAUTI
- Indwelling catheter should be changed every 3 weeks (silicone catheters can be changed less frequently)
- Consider increased frequency of change of catheter and bladder irrigation with saline (or neomycin-polymyxin solution) OD or bd, in patients developing encrustation, infection or sedimentation secondary to long-term use of indwelling catheter
- Assess the patient for compliance, physical dexterity and mental capacity before deciding on CIC
- CIC should be performed at least four times a day; a patient on CIC should not go without emptying the bladder for more than eight hours
- Ensure regular perineal care/hygiene

MANAGEMENT

Non-pharmacological measures

- Advise the patient to take adequate fluids up to 2L
- Ensure that the patient takes sips of fluid and not large quantity in a short period of time
- Avoid caffeine and alcohol (keep in mind patient preferences and prognosis)
- Advise the patients to use incontinence pads and not to use tissues papers or home products to contain the urine

Stress incontinence

- Correct the correctable
- Specific non-pharmacological measures
 - ➤ Biofeedback manoeuvres





- Ask the patient to stop the urinary stream voluntarily by contracting pelvic muscle and repeat the exercise of contracting and relaxing the pelvic muscles while sitting in a firm chair
- Once the patient has learned the manoeuvre, advise the patient to perform the manoeuvre whenever the patient is performing an activity which brings about stress incontinence
- Catheterisation with indwelling catheter if there is severe stress incontinence and intrinsic sphincter deficiency
- Pharmacological measures
 - > Tab. Imipramine 10 25mg hsod, maximum of 50mg hsod
 - > Tab. Duloxetine start at 20mg PO bd, after two weeks increase to 40mg bd

Urge incontinence

- Correct the correctable
- Specific non-pharmacological measures
 - ➤ Biofeedback manoeuvres see listed above in stress incontinence
 - Advise use of condom catheter in male patients, when urge incontinence is severe and unresponsive to treatment
 - Advise use of indwelling catheterisation in males when condom catheter is not appropriate and in females
- Pharmacological measures
 - > Tolterodine 2 4mg PO hsod; 2mg daily for patients with hepatic impairment
 - > Oxybutinin 5mg PO bd tid

Overflow incontinence

- Correct the correctable
- Specific non-pharmacological measures
 - Management of constipation and faecal impaction refer to the Guideline Constipation
 - Catheterisation with indwelling catheter
- Pharmacological measures
 - Terazosin or doxazosin 1mg PO OD, increase as tolerated to maximum dose of 10mg PO OD - in patients with outflow obstruction secondary to benign hyperplasia of prostate

Total incontinence

Indwelling catheter

Functional incontinence

• Encourage the patient to use a bed side commode or diapers







Urinary retention

- Treat and prevent constipation
- Indwelling catheter (see procedure below)
- Clean intermittent catheterisation (see procedure below)

Haematuria - refer to the Guideline - Haemorrhage for management of Haematuria

PROCEDURES

Catheterisation with indwelling catheter

- Materials needed
 - Indwelling Foley's catheter 14 16 French catheter in men and 12 14 French catheter in women
 - Drainage bag
 - > Xylocaine 2% jelly
 - ➢ Gloves
 - Povidone iodine solution
 - > Sterile water
 - Syringes
 - > Soap and water
- Procedure
 - Wash hands thoroughly with soap and water
 - Wear the gloves
 - Clean the perineal area/penis and the urethral meatus with povidone iodine solution and drape the area
 - In men, inject xylocaine 2% jelly 5mL into the urethra
 - In women, lubricate the tip and distal area of the catheter liberally with xylocaine 2% jelly
 - Introduce the catheter through the meatal opening (in males, keep the penis perpendicular to the surface of the abdomen)
 - ➤ Insert the catheter to the bifurcation of the drainage port
 - ➤ Allow the urine to flow and connect the opening of the tubing of the drainage bag to the drainage port of the catheter
 - ➤ Inject 10 mL of water into the retention balloon of the catheter and gently withdraw the catheter till the retention balloon reaches the neck of the bladder
 - > Secure the indwelling catheter to the thigh with a strap or adhesive tape
 - > Drainage bag should be below the level of symphysis pubis
- Maintenance
 - Clean the metal opening daily with soap and water





Clean intermittent catheterisation

- Materials needed
 - Soap and water
 - ➤ Lubricant Xylocaine 2% Jelly
 - ➤ Plastic catheter/Foley's catheter; use the smallest bore
 - Container/urinal to collect the urine
- Procedure
 - Wash hands thoroughly with soap and water
 - Females should do the procedure in sitting position; males in sitting or standing position
 - ➤ Wash the perineal area/penis and urethral meatus with soap and water; females could use a mirror to locate the urethral meatus initially if necessary
 - Lubricate the tip of the catheter liberally with xylocaine 2% jelly and allow the jelly to spread along the catheter
 - > Gently introduce the catheter:
 - 2 4 inches in females
 - 6 8 inches in male; usually the entire length of the catheter has to be introduced (in males, keep the penis perpendicular to the surface of the abdomen)
 - ➤ If any resistance is felt, hold firm and gently push until there is relaxation of muscles and the catheter passes through
 - Empty the urine into the container/urinal
 - When there is no outflow of urine gently withdraw the catheter
 - > Hold position if there is any further outflow
 - > Remove the catheter once the urine flow stops
 - Clean and store the catheter
- Maintenance of catheter
 - After use, immediately clean the catheters with soap and water
 - ➤ Rinse after cleaning with water and allow to dry
 - After air drying, store the catheter in a dry towel or paper bag
 - Discard catheters on evidence of breaks, deformity, sediments or encrustations

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