



CANCER OF BLADDER, URETER & URETHRA

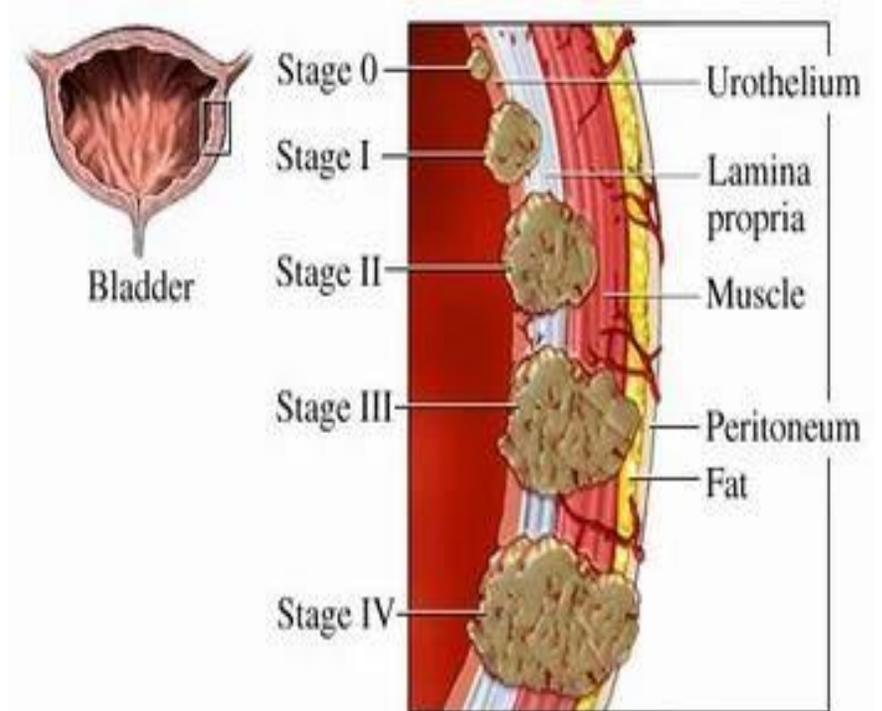
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CANCER OF BLADDER



Introduction

- Cancer of the urinary bladder is more common in people aged 50 to 70 years.
- It affects men more than women (3:1)
- There are two forms of bladder cancer: superficial (which tends to recur) and invasive.
- About 80% to 90% of all bladder cancers are transitional cell (which means they arise from the transitional cells of the bladder)
- The remaining types of tumors are squamous cell and adenocarcinoma.



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Risk factors

- Cigarette smoking: risk proportional to number of packs smoked daily and number of years of smoking
- Environmental carcinogens: dyes, rubber, leather, ink, or paint
- Recurrent or chronic bacterial infection of the urinary tract
- Bladder stones
- High urinary pH
- High cholesterol intake
- Pelvic radiation therapy
- Cancers arising from the prostate, colon, and rectum.

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Clinical Manifestations

- Bladder tumors usually arise at the base of the bladder and involve the ureteral orifices and bladder neck.
- Visible, painless hematuria is the most common symptom of bladder cancer.
- Infection of the urinary tract is a common complication, producing frequency, urgency, and dysuria.
- Any alteration in voiding or change in the urine, however, may indicate cancer of the bladder.
- Pelvic or back pain may occur with metastasis.

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Assessment and Diagnostic Findings

- Cystoscopy (the mainstay of diagnosis)
- Excretory urography
- CT scan
- Ultrasonography
- Bimanual examination with the patient anesthetized.
- Biopsies of the tumor and adjacent mucosa

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Management- surgical

- Transurethral resection or fulguration (cauterization) may be performed for simple papillomas (benign epithelial tumors). Eradicate the tumors through surgical incision or electrical current with the use of instruments inserted through the urethra.
- After this bladder-sparing surgery, intravesical administration of BCG is the treatment of choice.
- A simple cystectomy (removal of the bladder) or a radical cystectomy is performed for invasive or multifocal bladder cancer.
- Radical cystectomy in men involves removal of the bladder, prostate, and seminal vesicles and immediate adjacent perivesical tissues.

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Management- pharmacological

- Chemotherapy with a combination of methotrexate, 5-fluorouracil, vinblastine, doxorubicin (Adriamycin), and cisplatin
- Intravenous chemotherapy may be accompanied by radiation therapy.
- Topical chemotherapy (intravesical chemotherapy or instillation of antineoplastic agents into the bladder, resulting in contact of the agent with the bladder wall) is considered when there is a high risk for recurrence, when cancer in situ is present, or when tumor resection has been incomplete.
- Topical chemotherapy delivers a high concentration of medication (doxorubicin, mitomycin, ethoglucid, and BCG) to the tumor to promote tumor destruction.
- BCG is now considered the most effective intravesical agent for recurrent bladder cancer because it enhances the body's immune response to cancer.

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Management- radiation therapy

- Radiation of the tumor may be performed preoperatively to reduce microextension of the neoplasm and viability of tumor cells,

CANCER OF URETER



Introduction

- Ureteral cancer is usually transitional cell carcinoma.
- Transitional cell carcinoma is "a common cause of ureter cancer and other urinary (renal pelvic) tract cancers."
- Cancer of the ureter begins in the cells that line the inside of the tubes (ureters) that connect your kidneys to your bladder.
- Cancer of the ureter is uncommon.
- It occurs most often in older adults and in people who have previously been treated for bladder cancer.
- Men>women
- Whitish>black

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Risk factors

- Increased age
- Treatment of bladder cancer
- Tobacco smoking
- Analgesics nephropathy
- Industrial exposures

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- **Clinical features**
- blood in the urine (hematuria)
- diminished urine stream and straining to void (caused by urethral stricture)
- frequent urination and increased night time urination (nocturia)
- hardening of tissue in the perineum, labia, or penis
- itching
- incontinence
- pain during or after sexual intercourse (dyspareunia)
- painful urination (dysuria);
- recurrent urinary tract infection
- urethral discharge and swelling

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Diagnostic evaluation

- Computed tomography urography (CTU),
- Magnetic resonance urography(MRU),
- Intravenous pyelography (IVP)
- X-ray,
- Ureteroscopy
- Biopsy

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Management

Treatment methods include:

- Surgery
- Chemotherapy
- Radiation therapy
- Medication.

CANCER OF URETHRA



Introduction

- Urethral cancer is cancer originating from the urethra.
- Cancer in this location is rare, and the most common type is papillary transitional cell carcinoma
- Having a history of bladder cancer
- Having conditions that cause chronic, swollen, reddened part in the urethra.
- Being 60 or older.
- Being a white female.

CANCER OF URETHRA



Clinical features

- Bleeding from the urethra or blood in the urine.
- Weak or interrupted flow of urine.
- Urination occurs often.
- A lump or thickness in the perineum or penis.
- Discharge from the urethra.
- Enlarged lymph nodes in the groin area.
- Most common site being bulbomembranous urethra

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Diagnostic evaluation

Diagnosis is established by transurethral biopsy

Types:

- transitional cell carcinoma
- squamous cell carcinoma
- adenocarcinoma
- melanoma

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Management - Surgery

- Open excision surgery.
- Electro-resection with flash surgery.
- Laser surgery
- Cystourethrectomy surgery.
- Cystoprostatectomy surgery.
- Incomplete or basic penectomy surgery.

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Management - chemotherapy

- Chemotherapy involves using drugs to destroy urethral cancer cells.
- It is a systemic urethral cancer treatment (i.e., destroys urethral cancer cells throughout the body) that is administered orally or intravenously (through a vein).
- Medications are often used in combination to destroy urethral cancer that has metastasized.
- Commonly used drugs include vincristine, cisplatin and methotrexate

Nursing Management



Preoperative interventions

- Administer bowel preparation as prescribed, which may include a clear liquid diet, laxatives and enemas, and antibiotics to lower the bacterial count in the bowel.
- Assist the surgeon and the enterostomal nurse in selecting an appropriate skin site for creation of the abdominal stoma.
- Encourage the client to talk about his or her feelings related to the stoma creation.

Nursing Management



Postoperative interventions

- Monitor Vital signs.
- Assess incision site.
- Assess stoma (should be red and moist) every hour for the first 24 hours.
- Monitor for edema in the stoma, which may be present in the immediate postoperative period.
- If the stoma appears dark and dusky, notify the physician immediately because this indicates necrosis
- Monitor for prolapse or retraction of the stoma.

Nursing Management



Postoperative interventions

- Assess for return of bowel function; monitor for peristalsis, which will return in 3 to 4 days.
- Maintain NPO status as prescribed until bowel sounds return.
- Monitor urine flow, which is continuous (30 to 60 mL per hour) following surgery.
- Notify the physician if the urine output is less than 30 mL an hour or if no urine output occurs for more than 15 minutes.
- Ureteral stents or catheters may be in place for 2 to 3 weeks or until healing occurs; maintain stability with catheters to prevent dislodgment.

Nursing Management



Postoperative interventions

- Monitor urinary output closely and irrigate catheter (if present) gently to prevent obstruction, as prescribed, with 60 mL of NS.
- Monitor for hematuria.
- Monitor for signs of peritonitis.
- Monitor for bladder distention following a partial cystectomy.
- Monitor for shock, hemorrhage, thrombophlebitis, and lower extremity lymphedema following a radical cystectomy.
- Monitor the urinary drainage pouch for leaks, and check skin integrity.

Nursing Management



Postoperative interventions

- Monitor the pH of the urine (do not place the dipstick in the stoma) because strong alkali urine can cause skin irritation and facilitate crystal formation.
- Instruct the client regarding the potential for urinary tract infection or the development of the calculuses.
- Instruct the client to assess the skin for irritation and to monitor the urinary drainage pouch for any leakage.
- Encourage the client to express feelings about changes in body image, embarrassment, and sexual dysfunction.



THANK YOU