See p. 000 for nursing care of the client undergoing tumor resection and a urinary diversion.

**NURSING CARE**

The client who undergoes treatment for a tumor of the urinary tract has many nursing care needs because of alterations in the functional health patterns of elimination, health perception/health management, cognitive/perceptual, self-concept, role/relationship, and coping/stress tolerance.

**Health Promotion**

Encourage all clients not to smoke. Provide referral to smoking cessation programs or clinics for clients who wish to quit smoking. Encourage clients at high risk for developing bladder cancer (Box 26–13) to have periodic examinations, including urinalysis and possible urine cytology.

**NURSING CARE  OF THE CLIENT HAVING CYSTECTOMY AND URINARY DIVERSION**

**PREOPERATIVE CARE**

- Provide routine preoperative care as outlined in Chapter 7.
- Assess knowledge of the proposed surgery and its long-term implications, clarifying misunderstandings and discussing concerns. Clients having surgery for cancer of the urinary tract are trying to cope with diagnosis of cancer and may not fully understand the surgery and its potential effects. Open discussion can facilitate postoperative recovery and adjustment.
- Begin teaching about postoperative tubes and drains, self-care of stoma, and control of drainage and odor. Postoperative physiologic and psychologic stressors may interfere with learning. A basic understanding of what to expect in the way of tubes, drains, and procedures reduces stress in the immediate postoperative period. Preoperative teaching can enhance recall and postoperative learning.
- Assist in identifying stoma site, avoiding folds of skin, bones, scar tissue, and the waistline or belt area. Be sure to consider the client’s occupation and style of clothing. The site should be visible to the client and accessible for manipulation. Stoma placement is a vital component of adjustment and self-care. Care is taken to place the stoma away from areas of constant irritation by clothing or movement. It should be located so that the client can cover and disguise the collecting device, maintain the seal to prevent leakage, and effectively cleanse and maintain the site.
- Perform bowel-preparation activities as ordered. Bowel preparation is done to prevent fecal contamination of the perineal cavity and to decompress the bowel during surgery.

**POSTOPERATIVE CARE**

- Provide routine postoperative care (See ch. 7).
- Monitor intake and output carefully, assessing urine output every hour for the first 24 hours, then every 4 hours or as ordered. Call the physician if urine output is less than 30 mL per hour. Tissue edema and bleeding may interfere with urinary output from stoma, catheters, or drains. Maintenance of urine output is vital to prevent hydronephrosis and possible renal damage. A urine output of at least 30 mL per hour is necessary for effective renal function.
- Assess color and consistency of urine. Expect pink or bright red urine fading to pink and then clearing by the third postoperative day. Urine may be cloudy due to mucus production by bowel mucosa. Bright red blood in the urine from a urinary diversion may indicate hemorrhage, necessitating further surgery. Excessive cloudiness or malodorous urine may indicate infection.
- Assess size, color, and condition of the stoma and surrounding skin every 2 hours for the first 24 hours, then every 4 hours for 48 to 72 hours. Expect the stoma to appear bright red and slightly edematous initially. Slight bleeding during cleansing is normal. Compromised circulation causes the stoma to appear pale, gray, or cyanotic or blanch when touched. Other complications, such as infection or impaired healing may be evidenced by a change in the appearance of the stoma or incision.
- Irrigate the ileal diversion catheter with 30 to 60 mL of normal saline every 4 hours or as ordered. Mucus produced by the bowel wall may accumulate in the newly devised reservoir or obstruct catheters.
- Monitor serum electrolyte values, acid-base balance, and renal function tests such as BUN and serum creatinine. Reabsorption of electrolytes from reservoirs created by portions of bowel may result in electrolyte imbalance and metabolic acidosis. Optimal renal function is necessary to maintain a normal state of homeostasis.
- Teach the client and family about stoma and urinary diversion care, including odor management, skin care, increased fluid intake, pouch application and leakage prevention, self-catheterization for clients with continent reservoirs, and signs of infection and other complications. The ability to provide self-care is a significant factor in the adjustment to a changed body image. Teaching family members facilitates acceptance and adjustment. The family also needs this knowledge in case illness or disability interferes with the self-care capacity.

**Assessment**

Nursing assessment related to urinary tract cancer includes both subjective and objective information.

- Nursing history: risk factors; history of hematuria or manifestations of UTI (dysuria, frequency, urgency, pyuria); lower abdominal discomfort or flank pain
- Physical examination: general health; abdominal tenderness; urine for analysis.

**Nursing Diagnoses and Interventions**

**Impaired Urinary Elimination**

Whether the client has undergone transurethral resection of a bladder tumor or radical cystectomy with urinary diversion, urinary elimination is altered at least temporarily.

- Monitor urine output from all catheters, stents, and tubes for amount, color, and clarity hourly for the first 24 hours postoperatively, then every 4 to 8 hours. Decreased urine output