Nursing Implications for Diagnostic Tests

**Urinary Incontinence**

**POSTVOIDING RESIDUAL VOLUME**

**Preparation of the Client**
- Instruct the client to notify the nurse when the urge to void (urinate) is felt.
- Have client void into a collection device. Instruct to empty bladder as completely as possible. Provide for privacy to avoid “shy-bladder” syndrome.
- Immediately after voiding, catheterize using aseptic technique and a straight catheter. Drain bladder completely of residual urine.
- Record time; amount voided; amount obtained on catheterization; color, clarity, and odor of urine; and any other significant data.

**Client and Family Teaching**
- This test is used to determine how completely you empty your bladder with voiding.

- Residual urine (urine left in the bladder after urination) increases the risks of urinary infection and incontinence.
- This test poses a slight risk of infection. Report symptoms of frequency, urgency, pain on urination, nocturia, and cloudy, bloody, or malodorous urine.

**CYSTOMETROGRAM (CMG)**

**Preparation of the Client**
- Verify a signed consent for the test.
- Check for UTI as indicated by urinalysis or manifestations; infection may interfere with test results.
- No food or fluid restriction is required for this test.
When incontinence is associated with postmenopausal atrophic vaginitis, estrogen therapy may be effective. Both systemic estrogens and local creams are used.

Clients with urge incontinence may be treated with preparations that increase bladder capacity. The primary drugs used to inhibit detrusor muscle contractions and increase bladder capacity include oxybutinin (Ditropan), an anticholinergic drug, and tolterodine (Detrol), a more specific antimuscarinic agent. These drugs can be taken once or twice a day, and have fewer side effects than less specific anticholinergic drugs. Drugs with anticholinergic effects are contraindicated for the client with acute glaucoma. Urinary retention is a potential side effect that must be considered when these drugs are used (see Box 26–16).

**UROFLOWMETRY**

**Preparation of the Client**

- Withhold medications that may interfere with test results.

**Client and Family Teaching**

- This is a rapid, simple test to measure the volume of urine voided per second.
- Privacy is provided during testing. Male clients void while standing; females, while sitting.
- You will urinate into a funnel.
- Drugs affecting bladder and sphincter tone, movement during testing, and straining during voiding may invalidate test results.
- Increase your fluid intake and do not urinate for several hours prior to the test to ensure a full bladder and a strong urge to void during testing.
- No discomfort or risk is associated with this test.

**Surgery**

Surgery may be used to treat stress incontinence associated with cystocele or urethrocele and overflow incontinence associated with an enlarged prostate gland.

Suspension of the bladder neck, a technique that brings the angle between the bladder and urethra closer to normal, is effective in treating stress incontinence associated with urethrocele in 80% to 95% of clients. A laparoscopic, vaginal, or abdominal approach may be used to perform this surgery. Care of the client with a bladder neck suspension is outlined on page 738.

Prostatectomy, using either the transurethral or suprapubic approach, is indicated for the client who is experiencing incontinence. Accurate diagnosis is vital to planning and implementing appropriate care measures, and achieving the desired outcome of continence. Successful treatment promotes self-esteem and provides positive reinforcement for continuing planned strategies.

**Critical Thinking in Client Care**

1. What nursing care measures and client teaching will you provide for the client with stress incontinence that may not be appropriate or necessary for the client with urge incontinence? For the client with urge incontinence but not stress incontinence?
2. Identify circumstances in which it may not be possible or feasible to have the client undergo urodynamc testing to differentiate stress, urge, or mixed (stress and urge) incontinence.
3. The clients in this study lived independently in the community and were cognitively intact. Can the data in this study be generalized to clients residing in a long-term care facility? Can the results be applied to all types of incontinence? Why or why not?