Chapter 51

Care of the Patient with a Reproductive Disorder

Male Reproductive System

- Testes (testicles)
- Ductal system
  - Epididymis
  - Ductus deferens (vas deferens)
  - Ejaculatory duct and urethra
  - Accessory glands
- Urethra and penis
- Sperm

Testes

- Enclosed in the scrotum
- Produce sperm cells
- Produce testosterone
Ductal System

- Epididymis forces sperm into the seminiferous tubules in response to sexual stimulation
- Ductus deferens (vas deferens) is the pathway through which sperm is expelled
- Ejaculatory duct and urethra
- Accessory glands
  - Seminal vesicles produce 60% of the volume of semen
  - Prostate gland secretes alkaline fluid that contributes to motility of sperm
  - Cowper’s gland
  - Provide lubrication during sexual intercourse

Urethra and Penis

- The male urethra has two purposes: conveying urine from the bladder and carrying sperm to the outside
- The cylindrical penis is the organ of copulation

Sperm

- Mature sperm consist of three distinct parts
  - The head
  - The midpiece
  - The tail
The Female Reproductive System

- Ovaries
- Fallopian tubes (oviducts)
- Uterus
- Vagina
- External genitalia
- Accessory glands
- Perineum
- Mammary glands (breasts)

Ovaries

- At puberty, ovaries release progesterone and the female sex hormone estrogen
- They release a mature egg during the menstrual cycle

Fallopian Tubes (Oviducts)

- Fertilization takes place in the outer third of these tubes
Uterus

- Shaped like an inverted pear and measures 3 inches long by 2 inches wide
- Consists of three layers of tissue
  - Endometrium
  - Myometrium
  - Perimetrium
- Cervix

Vagina

- A thin-walled, muscular, tubelike structure of the female genitalia, approximately 3 inches long

External Genitalia

- Mons pubis
- Labia majora
- Labia minora
- Clitoris
- Vestibule
Accessory Glands

- Paraurethral glands
- Bartholin’s glands

Perineum

- Starts at the symphysis pubis and extends to the anus

Mammary Glands (Breasts)

- Contain lactiferous ducts
- Milk production does not start until a woman gives birth
- Oxytocin allows milk to be released
Menstrual Cycle

- Three phases
  - Menstrual phase
  - Preovulatory phase
  - Postovulatory phase

Illness and Sexuality

- Illness may change a patient’s self-concept and result in an inability to function sexually
- Health status has a strong influence on sexual interest and desire
- The sexual symptoms often disappear as patients recover from the acute phase of illness and resume sexual activity
- Some illnesses may cause patients concern or may result in actual inabilities with sexual function

Diagnostic Exams

- Colposcopy
- Culdoscopy
- Laparoscopy
Papanicolaou (Pap) Test (Smear)

- A simple smear method of examining stained exfoliative peeling and sloughed-off tissue or cells
- Most widely known for its use in the early detection of cervical cancer
- The American Cancer Society (ACS) (2013b) highly recommends that every woman begin annual Pap tests within 3 years after becoming sexually active or no later than 21 years of age
- Women should be tested every 2 years

Inflammatory and Infectious Disorders of the Female Reproductive Tract

- Simple vaginitis
- Senile vaginitis or atrophic vaginitis
- Cervicitis

Simple Vaginitis

- Cause is bacterial inflammation
- Clinical manifestations include discharge, itching, and burning
- Diagnostic exams include a culture of the vagina
- Medical management is aimed at treating infection and preventing complications
- Nursing interventions are aimed at preventing further complications
Senile Vaginitis or Atrophic Vaginitis

- Low estrogen levels cause the vulva and vagina to thin and atrophy, becoming more susceptible to the invasion of bacteria
- The exudate causes pruritus, edema, and skin irritations
- Estrogen, vaginal suppositories, and ointments may be prescribed

Cervicitis

- Caused by a variety of factors, but is most commonly linked to sexually transmitted infections such as chlamydia, gonorrhea, herpes virus, human papilloma virus, and trichomoniasis
- Therapy is specific to the causative organisms
- Symptoms are dyspareunia; vaginal pain; pelvic heaviness; abnormal vaginal bleeding; and gray, white, or yellow vaginal discharge

Pelvic Inflammatory Disease (PID)

- Most commonly caused by gonorrhoeae, streptococci, staphylococci, chlamydiae, and tubercle bacilli
- Signs and symptoms are temperature elevation, chills, severe abdominal pain, malaise, nausea and vomiting, and malodorous purulent vaginal exudates
- Diagnostic tests include gram stains of secretions from the endocervix, urethra, and rectum
- The goal of treatment is to control and eradicate the infection by preventing it from spreading to other body systems
Pelvic Inflammatory Disease (PID) cont’d

- Nursing interventions include
  - Assessing pain and administering prescribed analgesics as needed
  - Monitoring vital signs and progress of treatment
  - Providing fluids to avoid dehydration
  - Performing palliative measures for comfort such as bathing, changing of perineal pads, personal hygiene, and warm douches
  - Providing patient support with a positive, nonjudgmental attitude
  - Positioning the patient in Fowler’s position to facilitate drainage

Endometriosis

- A condition in which endometrial tissue appears outside the endometrial cavity
- Believed to affect 40-60% of women who experience painful menstrual periods
- Dysmenorrhea is the most common complaint
- Ultrasound may be performed to identify cysts and large areas of endometrial tissue outside of the uterus
- Laparoscopy with a biopsy of the lesions may confirm the diagnosis

Endometriosis cont’d

- Laparoscopy with a biopsy of the lesions may confirm the diagnosis
- Nursing diagnoses
  - Pain
  - Sexual dysfunction
Vaginal Fistula

- A fistula is an abnormal opening between two organs
- Urethrovaginal fistula
- Vesicovaginal fistula
- Rectovaginal fistula

Vaginal Fistula cont’d

- Fistulas are recognized by their exudate, which has a distinct odor of urine or feces
- Treatment may be conservative or require surgical repair
- Sitz baths, deodorizing douches, perineal pads, and protective undergarments are necessary

Cystocele and Rectocele

- The relaxation of the tissues, muscles, and ligaments of the bladder causes a displacement of the bladder into the vagina
- Clinical symptoms are urinary urgency, frequency, and incontinence; fatigue; and pelvic pressure
- Cystocele and rectocele are corrected through anteroposterior colporrhaphy
- Nursing interventions are aimed at patient teaching and pre- and postsurgical care
Cancer of the Female Reproductive Tract

- Cancer of the cervix
- Cancer of the endometrium
- Cancer of the ovary

Cancer of the Cervix

- A neoplasm that can be detected in the early, curable stage by a Pap test
- The 5-year relative survival rate for localized stage cervical cancer was 92% in 2009
- Women who become sexually active in their teens are at an increased risk for cancer of the cervix
- Cervical cancer risk is closely linked to sexual behavior, STIs with several strains of HPV, and smoking

Cancer of the Cervix cont’d

Clinical Manifestations

- Most cervical cancer is silent in the early stages and has few symptoms
- The two primary symptoms are leukorrhea and irregular vaginal bleeding or spotting between menses
Cancer of the Cervix cont’d

Diagnostic Tests
- Pap test
- Physical examination
- Colposcopy and cervical biopsy
- CT scan

Cancer of the Cervix cont’d

Medical Management
- Gardasil
- Hysterectomy
- Radiation
- Chemotherapy

Cancer of the Cervix cont’d

Nursing Interventions
- Include verbal reassurance and support
- Pain relief
- Assessment
- Skin care
Cancer of the Endometrium

- Usually affects postmenopausal women
- Likely to be localized, but may spread to the cervix, bladder, rectum, and surrounding lymph nodes
- Pelvic and rectal examination and endometrial biopsy are used to diagnose cancer of the endometrium
- Surgery, radiation, or chemotherapy may be used to remove the tumor

Cancer of the Ovary

- In the early stages, the tumors are asymptomatic
- Symptoms may be vague abdominal discomfort, flatulence, mild gastric disturbances, pressure, bloating, cramps, sense of pelvic heaviness, feeling of fullness, and change in bowel habits
- Women at increased risk are those who are infertile, anovulatory, nulliparous, and habitual aborters
- Although detecting ovarian cancer early is difficult, an annual bimanual pelvic examination may help to identify pelvic masses
- Medical management may include surgery, radiation, and chemotherapy

Hysterectomy Preoperative Care

- Encourage verbalization of fears
- Instruct the patient how to turn, cough, and deep breathe
- Empty patient’s colon
- Surgically prepare the skin
Hysterectomy Postoperative Care

- Assessment
- Monitor VS
- Monitor urinary catheter
- Assess lower extremities for redness or tenderness
- Avoid postural hypotension
- Incentive spirometry
- Turn, cough, and deep breathe
- Ambulate with assistance
- Provide patient teaching

Breast Self-Examination

- Visual inspection should be done when the woman is stripped to the waist and looking in a mirror, using the following arm positions
  - Arms at rest at sides
  - Hands on hips and pressed into hips
  - Contracting chest muscles
  - Hands over the head
  - Hands over head (torso leaning forward)
- Examination of large breasts and axillae is better done in a supine position rather than standing
- The entire breast should be examined in a systematic way, moving clockwise, with a circular motion, or moving back and forth
- Always include the axillae in the examination
- Do not forget specific examination of the nipple
- Report any changes to the health care provider

Surgical Intervention for Breast Cancer

- Lumpectomy
- Single mastectomy
- Modified radical mastectomy
- Bilateral mastectomy
Adjuvant Therapies for Breast Cancer

- Radiation
- Chemotherapy
- Hormonal therapy
- Monoclonal antibody therapy

Nursing Interventions for the Radical Mastectomy Patient

- Monitor vital signs
- Observe for symptoms of shock
- Observe for hemorrhage
- Monitor drains
- Monitor postoperative dressings
- Monitor respiratory effort

Nursing Interventions for the Radical Mastectomy Patient cont’d

- Assess and treat pain
- When the vital signs are stable, place the patient in a 45-degree Fowler’s position to promote drainage
- Encourage deep breathing and coughing
- Provide wound care
- Monitor patient-controlled analgesia pump
Mastectomy Discharge Concerns

- Explain the follow-up routine to the patient
- Emphasize the importance of beginning and continuing breast self-examination
- Explain the importance of annual mammography
- Symptoms that should be reported to the health care provider
- Specific instructions about appointment times and treatment locations

Mastectomy Discharge Concerns cont’d

- If applicable, stress the importance of wearing a well-fitting prosthesis
- Often the husband, sexual partner, or family member may need assistance in dealing with their emotional reactions to the diagnosis and surgery for them to effectively support the patient
- Counseling may be necessary for women with breast cancer to deal with the emotional component of a modified radical mastectomy and the diagnosis of cancer

Inflammatory and Infectious Disorders of the Male Reproductive System

- Prostatitis
- Epididymitis
**Prostatitis**

- Inflammation or infection of the prostate gland
- May be acute or chronic
- Most common cause is bacterial
- The clinical manifestations of acute prostatitis include chills, fever, prostate pain and tenderness, and arthralgias
- Urinary specific symptoms may include dysuria, frequency, nocturia, weak stream, and hesitancy

**Prostatitis cont’d**

- Diagnosis is based on culture and sensitivity tests of the urethra, prostatic fluid, and urine for organism identification and appropriate antibiotic therapy
- Medical management includes antibiotic therapy and pain control
- Heat may be applied by means of a sitz bath
- Nursing interventions primarily focus on symptoms and include
  - A full explanation of antibiotic therapy and the need for compliance with treatment, which may be lengthy in chronic prostatitis
  - Supportive care
  - Monitoring I&O
  - Encouragement of follow-up for evaluation of the inflammation

**Epididymitis**

- Risk factors include being uncircumcised, recent surgery involving the urinary tract, structural issues, regular use of a urethral catheter, and unprotected sexual intercourse with multiple partners
- Severe pain appears suddenly in the scrotum and radiates along the spermatic tube
- Edema appears and the patient develops a “duck walk” or “waddling gait” because of the sensitivity and pain that walking stimulates
- Medical management includes a regimen of bedrest and support of the scrotum and antibiotics for both partners
Epididymitis cont’d

- Nursing interventions for patients with epididymitis include:
  - Bedrest during the acute phase of illness
  - Support of the testicular area
  - Scrotal support by elevation of the scrotum
  - Ice compresses to the area in the initial phase to hasten recovery
  - Explanation of the need for compliance with antibiotic therapy until all signs of inflammation have disappeared
  - Advice to refrain from sexual intercourse during the acute phase

Hydrocele

- An accumulation of fluid between the membranes covering the testicle and the membrane enclosing the testicle
- Most hydroceles occur in men older than 21 years of age
- No treatment is indicated unless the edema becomes large and uncomfortable
- If edema is uncomfortable, treatment includes aspiration of fluid from the sac or surgical removal of the sac to avoid constriction of the circulation of the testicles

Hydrocele cont’d

- Nursing interventions:
  - Maintain bedrest
  - Scrotal support with elevation
  - Ice to edematous areas
  - Frequent changes of dressings to avoid skin impairment
Varicocele

- Occurs when the veins within the scrotum become dilated
- The symptoms are a pulling sensation that causes a dull aching and pain accompanied by edema of the scrotal area
- The treatment is surgical removal of the obstruction
- Nursing interventions include bedrest with scrotal support, ice on the incisional site, and medication for discomfort as ordered

Testicular Self-Examination

- Examine the scrotum once a month
- Perform testicular self-examination after a bath or shower when scrotum is warm and most relaxed
- Grasp testis with both hands and palpate gently between thumb and index finger
- The testis should feel smooth and egg-shaped and be firm to touch
- The epididymis, found behind the testis, should feel like a soft tube

Patient Teaching for STIs

- Importance of wearing a condom
- Importance of monogamy
- Signs and symptoms of STI
- Importance of seeking treatment promptly
- Notifying partners
- Importance of completing treatment regimen