Chapter 39 Clients with Female Reproductive System Disorders

Structure and Function of the Female Reproductive System

° External structures (vulva) [corresponds to Figure 39-1]
  o Mons pubis
  o Labia majora and minora
  o Clitoris
  o Skene’s gland and Bartholin glands
  o Vaginal introitus
  o Perineum

° Internal structures [corresponds to Figure 39-2]
  o Terms: vaginal introitus, perineum
  o Vagina
  o Ovaries
  o Uterus
    • Fundus
    • Corpus
    • Cervix
      ↑ Cervical os
  o Fallopian tubes
    • Ampulla
    • Fimbriae

° Breasts [corresponds to Figure 39-3]
  o Mammary glands
    • 15-20 lobes divided by adipose tissue
  o Prolactin – produced by anterior pituitary gland
  o Breast Teaching
    • Teach self breast exam (discussed under collaborative care).
    • Teach signs and symptoms to report to health care provider.

° Puberty
  o Between 11 to 13 years of age primary and secondary sex characteristics develop, takes 5 to 6 years:
    • Hips broaden.
    • Breast tissue develops.
    • Pubic hair grows.
    • Sebaceous glands become active.
    • Vaginal secretions become “milky”, change from alkaline to acid pH.

° Menstruation
  o Menarche
    • Begins during puberty
    • Occurs when oocyte is released from ovary
    • Born with ~ 300,000 oocytes; about 450 periods in lifetime
    • Oocyte is released due to influence of luteinizing hormone
  o Ovarian cycle
    • Follicular phase
    • Ovulatory phase
• Luteal phase
• Influenced by:
  ↑ Follicle stimulating hormone - FSH
  ↑ Luteinizing hormone - LH

Ovulation
• Corpus luteum
  ↑ Estrogen
  ↑ Progesterone

Menstrual cycle has three phases
• Menstrual phase
• Proliferative phase
• Secretory phase
  ↑ Progesterone

Menstruation teaching
• Keep record of start date, cycle length, associated symptoms
• Signs of impending menstruation
• Tampon use
• Sanitary pad use
• Hygiene - after elimination, wipe from front to back

Female sexual response
• Phases of sexual response [corresponds to Table 39-1]
• Cultural differences [corresponds to Box 39-1]
• Open-ended questions are less threatening and should be used when assessing client’s health history [corresponds to Box 39-2]

Contraception
• Top four methods [corresponds to Table 39-2]
• Nurse must be knowledgeable about:
  o Method
  o Proper use
  o Effectiveness
  o Hazards

Collaborative Care
• Physical assessment yearly
  o History to include sexual health history [corresponds to Box 39-2]
  o Physical exam
  o Breast exam by MD or advanced practice nurse
    • Mammogram
    • Self examination [Corresponds to Figure 39-6]
  o Pelvic exam by MD or advanced practice nurse
    • Visualization of cervix
    • Bimanual exam
    • Papanicolaou (PAP) test
    • Ultrasound
• Nurse responsibilities:
  o Assist health care provider.
  o Prepare client for procedures.
Disorders Related to Menstrual Cycle

- **Bleeding abnormalities**
  - **Dysmenorrhea**
    - Primary dysmenorrhea associated with excessive production of prostaglandins
    - Secondary dysmenorrhea may be related to endometriosis, fibroid uterine tumors, pelvic inflammatory disease, ovarian cancer, or use of IUD
    - Manifestations: cramping, lower abdominal pain radiating to back and upper thighs, nausea, vomiting, diarrhea, headache
    - Treatment:
      - For primary dysmenorrhea: mild analgesics, NSAIDs, oral contraceptives, exercise, relaxation techniques, stress management; reduce caffeine, sodium, alcohol, sugar, fluids; increase protein, calcium, magnesium, vitamin B6; complementary therapy (aromatherapy, massage, etc.)
      - For secondary dysmenorrhea: treat underlying cause
  - **Alterations in uterine bleeding**
    - Amenorrhea – absence of menstruation r/t hormonal or structural abnormality, polycystic ovarian disease, imperforate hymen, anorexia nervosa, bulimia nervosa, or intense athletic training
    - Menorrhagia – repetitive, excessive or prolonged menstrual flow; can lead to excessive blood loss, fatigue, anemia, hemorrhage, sexual dysfunction
    - Metrorrhagia – bleeding between periods from hormonal imbalance, oral contraceptive use, subdermal implant use, pregnancy, ectopic pregnancy, endometriosis, STIs, cervical polyps, uterine polyps or fibroids, or cervical or uterine cancer
    - Treatment: dilation and curettage (D&C)
  - **Premenstrual syndrome (PMS)**
    - Occur 3-14 days prior to menstruation
    - Signs and symptoms are related to menstruation
    - Treatment:
      - Restricting sodium, caffeine, tobacco, alcohol, sweets
      - Exercise, vitamins, ibuprofen, diuretics
      - Stress management, antidepressants

**Menopause**

- Perimenopause – 7 to 10 years as reproductive function declines
- Menopause – defined as: cessation of menses for one year, surgical removal of ovaries, chemotherapy to ovaries causing end to function; or FSH level > 30mIU/L
- Symptoms due to decline in estrogen:
  - Vasomotor instability (hot flashes, night sweats)
  - Vaginal dryness
Urinary incontinence
Dyspareunia
Decreased libido

Health risks include osteoporosis and coronary heart disease

Treatment:
- Hormone replacement therapy (HRT) for short period for women whose quality of life is affected
  - Slight association between HRT and heart disease, stroke, and cancer
- Cool environment
- Reduce caffeine and alcohol, vitamin E, balanced diet
- Stress management, exercises, Kegel exercises
- Water soluble lubricant for intercourse

Nursing care of clients with menstrual disorders:
- Focus on managing symptoms and reassuring clients.
- Teach about nonpharmacologic and pharmacologic treatments.
- Help client determine whether exercise or rest brings relief of symptoms.
- Explain risks for complications.
- Allow opportunity to express feelings.
- Discuss stress management techniques.

Nursing Process Care Plan: Client with Amenorrhea

Structural Abnormalities of the Female Reproductive Tract

- Uterine positions and displacement
  - Retroversion
  - Retroflexion
  - Anteflexion
  - Anteversion
  - Uterine prolapse
    - Medical management for uterine prolapse
      - Kegel exercises
      - Physical therapy
      - Pessary
    - Surgical management
      - Shorten and suspend uterine ligaments
      - Hysterectomy

- Congenital abnormalities
  - Bicornate uterus
  - Absence of uterus, ovaries, vagina, or fallopian tubes
  - Ambiguous genitalia
    - Hermaphroditism

Priorities in nursing care for client with structural disorders:
- Focus on managing symptoms and providing emotional support.

Tumors and Cysts and Abnormal Growth

Prevention methods
- Physical exam yearly
- Breast
• Self breast exam monthly
• Mammogram
• American Cancer Society recommends annually after age 40 years
  o Pelvic exam annually
  o Papanicolaou (Pap) tests; scraping of cervical cells
    • American Cancer Society and American College of Obstetrics and
      Gynecologists recommend annually when sexual activity begins or
      at age 18
    • After age 30, every 2-3 years if there have been 3 negative results
      in a row or woman has had hysterectomy for noncancerous
      reasons
° Fibroids – leiomyomas [corresponds Figure 38-9]
  o Manifestations: might be none; menorrhagia is most common; low back
    pain, pressure in pelvis, dysmenorrhea, anemia, malaise
  o Treatment:
    • D&C, myomectomy
    • Uterine fibroid embolization
    • Hysterectomy
° Malignant disorders
  o Endometrial cancer
    • Manifestations: bleeding after menopause; abdominal pain and
      pressure
    • Treatment:
      ↑ Total abdominal hysterectomy with bilateral salpingo-oophrectomy
      ↑ Progesterone, radiation, chemotherapy
  o Cervical cancer
    • Risk factors for cervical cancer [corresponds to Box 39-3]
    • Manifestations: asymptomatic until tumor invades surrounding
      tissue
    • Treatment:
      ↑ Coloscopy, loop electrosurgical excision procedure (LEEP),
      laser therapy, cryosurgery, conization
      ↑ Pelvic exenteration, hysterectomy
      ↑ Radiation or chemotherapy
  o Ovarian cancer
    • Treatment:
      ↑ Unilateral oophorectomy, total abdominal hysterectomy with
      bilateral salpingo-oophrectomy
      ↑ Radiation or chemotherapy
  o Cancer of the vulva
    • Treatment:
      ↑ Laser surgery, cryosurgery, electrocautery, vulvectomy
° Endometriosis
  o Implantation of endometrial tissue in areas outside the reproductive tract
Manifestations: dysmenorrhea, backaches, cramps, painful defecation and urination, dyspareunia; infertility

Risk factors: early menarche, irregular menstrual cycles with heavy flow

Treatment:
• Analgesics, NSAIDs, hormones
• Laser or electrocautery
• Total hysterectomy

Priorities in nursing care for client with cancer of female reproductive organs:
• Focus care on emotional support and management of symptoms.
• Be attentive to complaints of pain, pressure, and menstrual irregularities.
• Be supportive to women who have cancer of the reproductive tract.

Infections of the Female Reproductive Tract

Vaginitis

Cervicitis

Caused by STIs

Treat the causative organism

Sexually transmitted infections (STIs) – were called STDs

Explain risk factors for STDs (see Chapter 31)

Toxic shock syndrome (TSS)

Caused by bacterial toxin entering bloodstream; may result from very prolonged use of tampons without changing

High mortality rate

Manifestations:
• Sudden fever > 102 degrees F, vomiting, diarrhea; hypotension and shock within 72 hours; possible rash on trunk 1-2 weeks after onset with sloughing of palms and soles; possible sore throat, headache, or myalgia

Treatment: IV therapy with antibiotics, dopamine, antiipyretics

Pelvic Inflammatory Disease

Caused by STIs or bacteria, involves fallopian tubes, ovaries, cervix, uterus, and peritoneum

Main risk factors: multiple sex partners, early sexual activity; sometimes surgical procedures

Manifestations; may be asymptomatic; can include pain and tenderness in lower abdomen, fever, chills, elevated WBC count and erythrocyte sedimentation rate

Treatment: combination of antibiotics IV and then orally; bed rest; possible surgery to drain abscess, remove adhesions, or repair damaged fallopian tubes

Leads to increased risk for ectopic pregnancy or infertility

Priorities in nursing care:
• Focus on managing symptoms and on client teaching.
• Ensure that pain management is priority.
• Instruct clients about possible causes of PID.
• Teach clients to avoid sexual activity that puts them at risk for PID.
• Communicate nonjudgmentally to build trust.
• Arrange follow-up care or support group referrals.

Disorders of the Breasts
  ° Benign disorders with areas of lumpiness or thickness in breast tissue
    o Fibrocystic disease and fibroadenoma
      • Treatment for either includes aspirin or ibuprofen, vitamin E, dietary changes; may include danazol, oral contraceptive, or bromocriptine; always includes advice to get regular clinical breast exams, so monthly BSE, and schedule regular mammograms.
    o Fibrocystic disease
      • Avoid caffeine, sodium, nicotine
      • Resolves after menopause
    o Fibroadenoma – may be removed if causing pain
  ° Malignant disorders
    o Breast cancer
      • Predisposing factors = being female, > 50 years, and family history
      • Manifestations: nontender lump, usually in upper outer quadrant, bloody discharge from nipple, change in nipple position, dimpling of skin, retraction of nipple, difference in size of breasts; pain is late symptom
      • Treatment: depends on stage; surgery, chemotherapy, hormone therapy, and radiation [corresponds to Figure 39-14]
        • Simple mastectomy (removal of breast only)
        • Total (or radical; removal of breast, chest muscles, and axillary lymph nodes)
        • Segmental (or lumpectomy; removal of tumor and surrounding tissue)
        • Breast reconstruction when indicated and possible
    o Priorities in nursing care:
      • Focus on managing pain and anxiety, by pharmacologic and nonpharmacologic methods.
      • Notify care provider when treatments for pain are not adequate.
      • Position client to relieve pain.
      • Avoid IV infusions or BP readings on affected side.
      • Elevate arm on affected side.
      • Perform passive range of motion and encourage active range of motion exercises.
      • Encourage client to talk about feelings.
      • Be active and supportive listener.
      • Provide referral to support groups.

Critical Thinking Care Map: Caring for a Client After Hysterectomy