Lesson 13.1 Objective

- Discuss anatomic and physiologic processes related to the reproductive system.

Reproductive Organs

- Two groups of male and female reproductive organs
  - Primary: gonads
  - Secondary: organs and ducts that transport reproductive cells

Reproductive Organs (cont’d.)

- Gonads
  - Testes: Male primary reproductive organs that produce spermatozoa and hormones
  - Ovaries: Female primary reproductive organs that produce oocytes and hormones

Male Reproductive Organs

- Male secondary reproductive organs:
  - Epididymis
  - Ductus deferens
  - Ejaculatory ducts
  - Seminal vesicles
    - Prostate gland
    - Bulbourethral glands
    - Penis

Male Reproductive Organs (cont’d.)

- Epididymis – Site of sperm maturation
- Ductus (vas) deferens – Carries sperm from epididymis to ejaculatory duct; also called seminal duct
- Ejaculatory ducts – Transports sperm from ductus deferens to urethra
- Seminal vesicles – Secretes fluid that help make up seminal fluid
Male Reproductive Organs (cont’d.)

- Prostate gland – Secretes fluid that help make up seminal fluid
- Bulbourethral glands – Secretes fluid that help make up seminal fluid
- Penis – Contains urethra which is passageway for semen during ejaculation

Female Reproductive Organs

- Female secondary reproductive organs:
  - Fallopian tubes
  - Uterus
  - Cervix
  - Vagina
  - Vulva
  - Breasts

Female Reproductive Organs (cont’d.)

- Fallopian tubes – Carries ovum from ovaries to uterus
- Uterus – Site of endometrial changes during reproductive cycle and site of incubation of fertilized ovum
- Cervix – Base of uterus
- Vagina – Muscular canal from cervix to outside the body

Female Reproductive Organs (cont’d.)

- Vulva – External female genitalia
- Breasts – Produces milk which provides nourishment to infants through lactation

Female Reproductive Organs (cont’d.)

- Female breast anatomy
Lesson 13.2 Objectives
- Define disorders of the prostate and list their massage considerations.
- Identify conditions of the female reproductive system and list appropriate massage considerations.
- Name the various pathologies of the female reproductive system and state appropriate massage considerations.

Pathologies of the Prostate
- Benign prostatic hyperplasia
- Prostatitis

Benign Prostatic Hyperplasia
- Enlargement of the prostate gland, not malignant or inflammatory
- Suggest client void before massage; avoid lower abdomen if sensitive

Prostatitis
- Inflammation of the prostate
- Suggest client void before massage, avoid lower abdomen if sensitive
Conditions of the Female Reproductive System

- Menstruation
- Menopause

Menstruation

- Sloughing off of endometrial tissue from a nonpregnant uterus through the cervix and out the vagina
- Avoid massage over abdomen if sensitive

Female Fertility Cycle

Menopause

- Cessation of menstruation; life stage that takes place over several years
- Avoid overheating client by limiting use of blankets and flannel sheets as drape material; uncover client’s arms and feet

Pathologies of the Female Reproductive System

- Premenstrual syndrome
- Amenorrhea
- Dysmenorrhea
- Endometriosis
- Uterine fibroids
- Uterine prolapse
- Ovarian cysts and polycystic ovary syndrome
- Pelvic inflammatory disease
- Vaginal candidiasis

Premenstrual Syndrome

- Cluster of symptoms occurring 3 to 14 days before menstruation and relieved by its onset
- Modify massage according to symptoms; for example, position client for comfort in cases of breast tenderness
Breast Considerations

Amenorrhea
- Absence of menstruation; two types
  - Primary: failure of menarche by age 16
  - Secondary: cessation of menstruation for 6 months in individual who previously menstruated
- No massage modifications needed

Dysmenorrhea
- Painful menstruation; also called menstrual cramps and is most frequent gynecologic problem
- Avoid massage over abdomen if sensitive; clients with severe cramping may not feel up to receiving massage

Endometriosis
- Growth of endometrial tissue outside the uterus
- Avoid abdomen if sensitive

Uterine Fibroids
- Benign tumors originating in the uterus
- Avoid abdomen if sensitive

Uterine Prolapse
- Downward displacement of uterus or vagina from its normal position
- Position client for comfort

Endometriosis
- Growth of endometrial tissue outside the uterus
- Avoid abdomen if sensitive

Uterine Prolapse
- Downward displacement of uterus or vagina from its normal position
- Position client for comfort

Ovarian Cysts and Polycystic Ovarian Syndrome (PCOS)
- Ovarian cysts: fluid-filled sacs in ovary
- PCOS: Bilateral enlargement of ovaries with presence of multiple cysts
- Avoid abdomen if sensitive

Pelvic Inflammatory Disease
- Infection of female reproductive organs
- Massage is contraindicated

Vaginal Candidiasis
- Vaginal yeast infection
- No massage modifications needed

Lesson 13.3 Objectives
- Define pathologic conditions of the breast and list appropriate massage considerations.
- Discuss pregnancy and conditions related to pregnancy and list appropriate massage considerations.
- Define sexually transmitted infections and list appropriate massage considerations.
- List risk factors for contracting sexually transmitted infections.

Conditions and Pathologies of the Breasts
- Fibrocystic breast change
- Mastitis

Fibrocystic Breast Change
- Presence of nodular tissue in breasts
- Position client for comfort; breast massage helpful
Breast Massage

- Discuss with client before they disrobe
- No touching of nipples or areolae
- Can be performed under or through drape
- Protocol consists of light slow kneading at base of breast followed by gentle, slow gliding strokes
- End with several slow, gentle gliding strokes toward sternum or axilla

Mastitis

- Inflammation of the breast
- Massage is contraindicated if client has systemic infection indicated by fever; avoid upper body if infection is localized

Pregnancy and Pathologies Related to Pregnancy

- Pregnancy
- Ectopic pregnancy
- Abortion
- Preeclampsia and eclampsia
- Placental abruption
- Placenta previa

Pregnancy

- Sequence of events that begin with implantation, then embryonic and fetal growth, and end in birth; divided into 3 trimesters

Pregnancy (cont'd.)

- Massage is contraindicated during symptoms of miscarriage or if a high risk pregnancy
- Suggest client void before massage, avoid prone position after 1st trimester or when position is no longer comfortable

Pregnancy (cont’d.)

- When supine, tilt her toward the left with a small pillow, rolled towel, or wedge-shaped cushion under her right flank
Pregnancy (cont’d.)

- Avoid deep connective tissue and myofascial release techniques
- Avoid deep sustained pressure between ankle and heel
- Use only light pressure over abdomen after obtaining permission
- Use only light pressure on lower extremities during pregnancy and for 8-10 weeks after childbirth

Ectopic Pregnancy

- Implantation of a fertilized ovum outside the uterine cavity
- Massage is contraindicated until pregnancy has terminated and medical clearance is given

Abortion

- Premature termination of pregnancy; three types:
  - Spontaneous: Involuntary termination
  - Therapeutic: Termination is needed as the pregnancy is harmful to mother’s health
  - Elective: Woman elects termination
- Massage is contraindicated until pregnancy has terminated and medical clearance is given

Preeclampsia and Eclampsia

- Preeclampsia – State of persistent elevated blood pressure and protein in urine that develops after 20 wks of gestation and returns to normal after delivery
- Eclampsia – Severe form of preeclampsia involving convulsions or seizures
- Massage is contraindicated

Placenta Abruption

- Premature detachment of the placenta from uterine wall before fetal delivery
- Massage is contraindicated

Placenta Previa

- Encroachment of placenta over internal cervical os
- Massage is contraindicated
Sexually Transmitted Infections

- Chlamydia
- Gonorrhea
- Syphilis
- Genital herpes
- Genital warts
- Trichomoniasis

Risk Factors for Sexually Transmitted Infections

- Sex with person of unknown sexual history
- Drug use with sharing of needles
- Unprotected sex with many sexual partners
- Sexual intimacy with person who has been diagnosed with or treated for an STI
- Skin-to-skin contact in presence of open lesion

Risk Factors for Sexually Transmitted Infections (cont'd.)

- Drug or alcohol use
- Transfusion of blood or blood products
- Infants with HIV-positive mother
- Breastfed infants with HIV-positive mother
- Lack of education or concern about risky sexual behavior

Chlamydia

- Sexually transmitted infection caused by Chlamydia trachomatis bacteria
- Massage is contraindicated until condition has completely resolved

Gonorrhea

- Sexually transmitted infection caused by Neisseria gonorrhoeae bacteria
- Massage is contraindicated until condition has completely resolved

Syphilis

- Sexually transmitted infection caused by Treponema pallidum bacteria
- Massage is contraindicated until symptoms have completely resolved
Genital Herpes

- Sexually transmitted infection caused by a herpes simplex virus
- Massage is contraindicated if client has fever; otherwise, avoid buttocks or medial thigh and treat linens as contaminated

Genital Warts

- Sexually transmitted infection due to human papillomavirus causing soft, skin-colored single or clustered growths on genitalia, perineal, and perianal areas
- General massage permitted; however, treat linens as contaminated

Trichomoniasis

- Sexually transmitted infection caused by the Trichomonas vaginalis protozoa; reveals itself as a vaginal infection
- Massage is contraindicated until condition has completely resolved