Chapter 12

Reproductive System
Lesson 12.1 Female Reproductive System

1. State the function of the female reproductive system, and analyze associated terms.
2. Write the meanings of the word parts associated with the female reproductive system, and use the word parts to build and analyze terms.
3. Write the names of the structures of the female reproductive system when given their descriptions, define the terms associated with these structures and label the structures.
4. Sequence the reproductive cycle.
5. Write the names of the diagnostic tests and procedures for assessment of the female reproductive system when given descriptions of the procedures, or match the procedures with their descriptions.
6. Write the names of pathologies of the female reproductive system when given their descriptions, or match them with their descriptions.
7. Label uterine displacements.
8. Match surgical and therapeutic interventions for female reproductive system pathologies with descriptions of the interventions, or write the names of the interventions when given their descriptions.
Female Reproductive System

- gynecology (GYN, Gyn, gyn), gynecologic
- genitalia, external and internal
- urogenital, genitourinary (GU)
Word Parts: Female Reproductive System

genit(o)  organs of reproduction
oophor(o), ovari(o)  ovary
o(o)  egg (ovum)
salping(o)  fallopian tube
hyster(o), uter(o)  uterus
colp(o), vagin(o)  vagina
### TABLE 12-1  The Female Genitalia

<table>
<thead>
<tr>
<th>Internal Structures</th>
<th>External Structures (Vulva)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left ovary and associated left uterine tube</td>
<td>Mons pubis</td>
</tr>
<tr>
<td>Right ovary and associated right uterine tube</td>
<td>Labia majora</td>
</tr>
<tr>
<td>Uterus</td>
<td>Labia minora</td>
</tr>
<tr>
<td>Vagina</td>
<td>Clitoris</td>
</tr>
<tr>
<td>Special glands</td>
<td>Prepuce</td>
</tr>
<tr>
<td></td>
<td>Openings for glands</td>
</tr>
<tr>
<td>Word Part</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>metr(o)</td>
<td>measure, uterine tissue</td>
</tr>
<tr>
<td>perine(o)</td>
<td>perineum</td>
</tr>
<tr>
<td>vulv(o)</td>
<td>vulva</td>
</tr>
<tr>
<td>lapar(o)</td>
<td>abdominal wall</td>
</tr>
<tr>
<td>men(o)</td>
<td>month</td>
</tr>
<tr>
<td>top(o)</td>
<td>place or position</td>
</tr>
</tbody>
</table>
Terminology: Ovarian and Uterine Cycles

- menstrual cycle, ovarian cycle
- menarche, puberty
- menopause, climacteric
- menstruation
Quick Quiz!

Which of the following is the first onset of menstruation?

a. ovarian cycle  
b. menarche  
c. climacteric  
d. ovulation
Terminology: Ovarian and Uterine Cycles, (cont.)

- estrogen, progesterone
- oogenesis
- ovulation
- menses
<table>
<thead>
<tr>
<th>Days</th>
<th>Ovarian Phase</th>
<th>Uterine (Menstrual) Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-12</td>
<td>Follicular phase continues.</td>
<td>Proliferative phase. Growth of the endometrium.</td>
</tr>
<tr>
<td>13-14</td>
<td>Ovulation. Ovum is released by the follicle.</td>
<td>Proliferative phase continues.</td>
</tr>
</tbody>
</table>
Diagnostic Tests and Procedures:
Female Reproductive System

- vaginal speculum, bimanual examination, rectovaginal examination
- Pap smear, Papanicolaou test
- cytology, endometrial biopsy
- dysplasia
- *Trichomonas*, gonorrhea
Figure 12-7 From Black JM, Hawks JH: Medical-Surgical Nursing, ed 8, 2009, Saunders.
Figure 12-8 From Greer I, Cameron I, Kitchner H, Prentice A: Mosby’s Color Atlas and Text of Obstetrics and Gynecology, 2001, Mosby Ltd.
Diagnostic Tests and Procedures: Female Reproductive System, (cont.)

- colposcopy, colposcope, hysteroscopy, hysteroscope
- cervical biopsy
- hysterosalpingography, hysterosalpingogram
- VDRL, rapid plasma reagin
- blood hormone levels, human chorionic gonadotropin
- pelvic ultrasonography, computed tomography
Pathologies: Female Reproductive System

- Menstrual Disorders:
  - menorrhea, menorrhagia
  - metrorrhagia
  - amenorrhea, dysmenorrhea
  - premenstrual syndrome
Pathologies: Female Reproductive System, (cont.)

- Infections and Inflammation:
  - cervicitis
  - sexually transmitted diseases, gonorrhea
  - vaginitis, colpitis
  - vulvitis, vulvovaginitis, candidiasis
  - endometritis, myometritis, pelvic inflammatory disease
Pathologies: Female Reproductive System, (cont.)

- Ovarian disorders:
  - oophoritis, oophorosalpingitis
  - oophoropathy
  - oophoralgia, mittelschmerz
  - anovulation, polycystic ovary syndrome, ovarian cyst
  - ovarian cancer

Figure 12-10B Courtesy the Royal College of Obstetricians and Gynaecologists.
Pathologies: Female Reproductive System, (cont.)

- salpingocele, salpingitis
- ectopic pregnancy, tubal pregnancy
- septicemia, toxic shock syndrome
- uterine leiomyoma, cervical polyps
- hysteropathy
- uterine cancer
Figure 12-11 From Polaski AL, Tatro SE: Luckmann’s core principles and practice of medical-surgical nursing, Philadelphia, 1996, Saunders.
Quick Quiz!

Which term means a fertilized ovum implanted somewhere outside the uterine cavity?

a. endometritis  
b. hysterosalpingogram  
c. dysplasia  
d. ectopic pregnancy
Pathologies: Female Reproductive System, (cont.)

- hysteroptosis, prolapse

- Uterine displacements:
  - anteversion, retroversion
  - anteflexion, retroflexion
Pathologies: Female Reproductive System, (cont.)

- endometriosis
- leukorrhea
- colpodynia, colporrhagia
- vaginal fistulas
- cystocele, rectocele
Therapeutic Interventions: Female Reproductive System

- contraceptives
- aspirin, antiinflammatory drugs
- hormone replacement therapy
- antibiotics, vaginal creams, suppositories
- laser therapy
Surgical Interventions: Female Reproductive System

- vulvectomy
- vaginectomy, colpectomy
- colporrhaphy, colpoplasty
- oophoropexy
- laparoscopic or open (abdominal) surgery
Surgical & Therapeutic Interventions: Female Reproductive System, (cont.)

- oophorectomy, laparoscopic
- chemotherapy
- hysterectomy, abdominal, vaginal, or total abdominal
- oophorosalpingectomy, salpingo-oophorectomy
- pelvic exenteration
- colphohysterectomy, laparohysterectomy
Figure 12-18 From Lewis S, Heitkemper MM, Dirksen, SR, O'Brien PG, Bucher L: Medical-Surgical Nursing, Assessment and Management of Clinical Problems, ed 7, St. Louis, 2007, Mosby.
Surgical & Therapeutic Interventions: Female Reproductive System, (cont.)

- salpingectomy, tubal ligation, salpingostomy
- dilation and curettage (D&C)
- cryotherapy, cryosurgery
- cauterization, cauterize
- hysteropexy, salpingopexy, salpingorrhaphy
Lesson 12.2 Male Reproductive System

9. State the function of the male reproductive system, and analyze associated terms.

10. Write the meanings of the word parts associated with the male reproductive system, and use the word parts to build and analyze terms.

11. Write the names of the structures of the male reproductive system when given their descriptions, define the terms associated with these structures, and label the structures.

12. Describe the production of sperm.

13. Write the names of the diagnostic tests and procedures for assessment of the male reproductive system when given descriptions of the procedures, or match diagnostic tests and procedures with their descriptions.

14. Write the names of pathologies of the male reproductive system when given their descriptions, or match them with their descriptions.

15. Match surgical and therapeutic interventions for male reproductive system pathologies with descriptions of the interventions, or write the names of the interventions when given their descriptions.
Male Reproductive System

- spermatozoa (sperm)
- singular = spermatozoon
- testes = male gonads
- singular = testis
<table>
<thead>
<tr>
<th>Word Part</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>pen(o)</td>
<td>penis</td>
</tr>
<tr>
<td>balan(o)</td>
<td>glans penis</td>
</tr>
<tr>
<td>scrot(o)</td>
<td>scrotum</td>
</tr>
<tr>
<td>orch(o), orchid(o),</td>
<td></td>
</tr>
<tr>
<td>test(o), testicul(o)</td>
<td>testicle</td>
</tr>
<tr>
<td>Word Part</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>epididym(o)</td>
<td>epididymis</td>
</tr>
<tr>
<td>sperm(o), spermat(o)</td>
<td>spermatozoa</td>
</tr>
<tr>
<td>vas(o)</td>
<td>vessel; ductus deferens</td>
</tr>
<tr>
<td>prostat(o)</td>
<td>prostate</td>
</tr>
<tr>
<td>semin(o)</td>
<td>semen</td>
</tr>
</tbody>
</table>
Figure 12-21 B Courtesy of Fisher Scientific Company.
Hypothalamus stimulates Anterior pituitary

FSH stimulates Interstitial cells

LH stimulates Testosterone

Seminiferous tubule Supporting cell

FSH and testosterone act together to stimulate spermatogenesis

Secondary sex characteristics

Inhibits
Diagnostic Tests and Procedures: Male Reproductive System

- inspection of the external genitalia
  - urethral discharge, chancre
- palpation for inguinal hernias
- digital rectal examination
Diagnostic Tests and Procedures: Male Reproductive System, (cont.)

- prostate-specific antigen (PSA) test
- testicular self-examination
- needle biopsy of the prostate
- cytology
- sperm count
Urology: the medical branch specializing in the male reproductive system

Word Parts: Male Reproductive Pathologies

- crypt(o) hidden
- olig(o) few
- varic(o) twisted and swollen
Pathologies: Male Reproductive System

- testalgia, orchialgia, orchidalgia
- Infections and Inflammation:
  - orchiditis, orchitis
  - epididymitis, orchiepididymitis
  - balanitis
  - prostatitis, benign prostatic hyperplasia
Figure 12-23 Courtesy Dr. Ellen Wald, Children’s Hospital of Pittsburgh.
Quick Quiz!

Which of the following could be discovered during the *inspection* portion of an examination?

a. urethral discharge
b. increased PSA
c. bulbourethral glands
d. enlarged prostate
Pathologies: Male Reproductive System, (cont.)

- prostatic cancer
- Testicular Disorders:
  - testicular cancer
  - orchiopathy, anorchidism, anorchism
  - cryptorchidism
  - testicular torsion
Pathologies: Male Reproductive System, (cont.)

- oligospermia
- aspermia, aspermatogenesis
- azoospermia
- erectile dysfunction
- phimosis
Surgical & Therapeutic Interventions: Male Reproductive System

Testicular cancer:
- semen storage
- chemotherapeutic agents
- orchiectomy
- radiation therapy
- stem-cell transplantation
Surgical Interventions: Male Reproductive System, (cont.)

- orchioplasty, orchiotomomy, orchiorrhaphy
- orchiopexy, orchidopexy
- hydrocelectomy
- circumcision
Surgical Interventions: Male Reproductive System, (cont.)

- transurethral resection prostatectomy (TURP)
- transurethral microwave thermotherapy (TUMT)
- transurethral needle ablation (TUNA), ablation
- antibiotics
- prostatectomy
Surgical Interventions: Male Reproductive System, (cont.)

- vasectomy
- vasotomoy
- vasostomy
- vasovasostomy
Lesson 12.3

16. Use word parts from this chapter to determine the meaning of terms in a health care report.

17. Spell the terms accurately.

18. Pronounce the terms correctly.

19. Write the meanings of the abbreviations.

20. Categorize terms as anatomy, a diagnostic test or procedure, pathology, surgery, or therapy.
Abbreviations

BPH
Cx
D&C
FSH
GU
GYN, Gyn, gyn
hCG, HCG
Quick Quiz!

To what category does the meaning of HRT belong?

a. anatomy
b. diagnostic test or procedure
c. pathology
d. surgery
e. therapy
Abbreviations, (cont.)

LH
NIH
Pap
PID
PMS
PSA
RPR
Abbreviations, (cont.)

STD
TAH
TSS
TUMT
TUNA
TURP
VDRL