ANSWERS: CHAPTER 2

MATCHING

1. r 6. d 11. g 16. b
2. q 7. p 12. i 17. s
3. t 8. j 13. c 18. a
4. f 9. o 14. l 19. m
5. n 10. h 15. e 20. k

MULTIPLE CHOICE

1. c 6. a 11. d 16. b
2. b 7. d 12. a 17. a
3. d 8. b 13. a 18. b
4. a 9. c 14. c 19. c
5. c 10. a 15. d 20. d

FILL-IN-THE-BLANK

1. genitalia
2a. sexes
2b. ninth
3a. external
3b. maternal
4a. labia
4b. majora
4c. mon pubis
5. primordial phallus
6a. embryo
6b. 44th
6c. stage 18
7. female
8. Labioscrotal
9a. age
9b. size
9c. 8
10a. reproductive (genital)
10b. urinary
11a. gender
11b. fertilization
12a. female
12b. male
13a. Primordial
13b. 6
14. mesoderm
15. X
16. pronephros
17. Plüger’s
18. vaginal
19. 50
20. coexisting

case study

1. Identify the normal urinary bladder and pelvic anatomy when imaging the pelvis in a newborn girl.

to rule out masses and obstructions. A follow-up fetal ultrasound would probably not contribute additional diagnostic information to the pregnancy or fetus. The course of action should include a neonate ultrasound verifying anomalies of the female pelvis, which documents anatomy, as well as mass characteristics (size, contour, characteristics). The fetal kidneys must also be imaged searching for anomalies.

2. A hypoechoic pelvis mass posterior to the female bladder could result from cloacal anomalies, which can result in hydrometrocolpos. A hypoechoic mass posterior to the bladder may compress the urinary tract causing obstructive uropathy demonstrated by hydronephrosis or hydroureter. A complete examination of the urinary system (kidneys, bladder, and ureters, if possible) is warranted.

SHORT ANSWER

1. The appearance of hydrometrocolpos is a hypoechoic mass posterior to the bladder. It may compresses the urinary tract causing obstructive uropathy resulting in hydronephrosis or hydroureter.

2. Broad ligament: A fold of peritoneum that connects the uterus to the pelvis. Inguinal ligament: Resides in the bilateral female pelvis near the fallopian tubes. Proper ligament: Band of connective tissue that lies between the two layers of the broad ligament and connects the lower pole of the ovary with the lateral uterine wall. Suspensory ligament: A triangular fold of peritoneum that forms the upper lateral corner of the broad ligament and suspends both the ovary and the fallopian tube.

3. Not only is external development of the genitalia similar in both sexes until approximately the ninth week, ultrasound, even if performed transvaginally, does not currently have the ability to document such small (early) anatomy.

4. The female gamete (the ovum) always contains the X sex chromosome. The male gamete (the spermatozoon) contributes either an X (female) or Y (male). If the sperm contributes an X to the ovum’s X, the result is a female zygote (XX). If the male contributes a Y chromosome, the result is a male zygote (XY).

5. Developmental female pelvic abnormalities include the uterine, ovarian, fallopian tubes, and vaginal structures. One example may be a duplicated uterus with one septated vagina, which can cause obstruction to menstrual flow from one side presenting as unilateral hematocolpos. Imaging of the kidneys becomes important as there are often associated anomalies.
Part 1 — Gynecologic Sonography

**Image Labeling**

1. müllerian duct
2. wolffian body
3. wolffian tubule or duct
4. rete (primitive sex cords)
5. wolffian duct
6. müllerian duct
7. oogonia
8. follicular cells
9. degenerating wolffian tubules
10. mesonephros
11. cortical cords
12. inguinal ligament
13. müllerian tubercle
14. midline septum
15. degenerating wolffian duct
16. degenerating cortical cords
17. oogonia formation
18. müllerian duct (fallopian tube)
19. uterovaginal canal
20. fibriæ
21. fallopian tube
22. epoophoron
23. paroophoron
24. round ligament of uterus
25. suspensory ligament
26. ovary
27. mesovarium
28. body of uterus
29. cervix
30. vagina