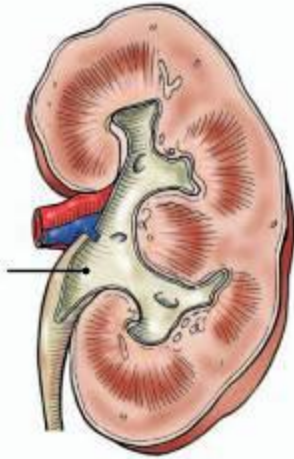


Urinary System Anatomy and Physiology

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ___ 1. Functions of the kidney include:
1. removing waste products from the blood.
 2. maintaining fluid and electrolyte balance.
 3. secreting substances that affect blood pressure.
- a. 1 and 2
 - b. 1 and 3
 - c. 2 and 3
 - d. 1, 2, and 3
- ___ 2. Which of the following is true regarding the kidneys?
- a. The left kidney is longer and narrower than the right.
 - b. The left kidney is lower than the right.
 - c. The right kidney is longer and narrower than the left.
 - d. Both kidneys are the same length and width.
- ___ 3. For which body habitus will the kidneys lie at the highest level?
- a. Sthenic
 - b. Asthenic
 - c. Hypersthenic
 - d. Hyposthenic
- ___ 4. How much will the kidneys drop in the change from the supine to the upright position?
- a. 1 inch
 - b. 2 inches
 - c. 3 inches
 - d. 3 $\frac{1}{2}$ inches
- ___ 5. The microscopic components of the parenchyma of the kidney are called:
- a. nephrons.
 - b. calyces.
 - c. the glomerulus.
 - d. cortical substances.
- ___ 6. The area of the kidney identified in the figure below is the:



- a. hilum.
 - b. renal pelvis.
 - c. renal sinus.
 - d. minor calyx.
- ___ 7. The cluster of blood capillaries contained within the capsule of a nephron is called the:
- a. cortex.
 - b. medulla.
 - c. Henle's loop.
 - d. glomerulus.
- ___ 8. Which of the following serves as the filter for the blood in the kidney?
- a. Glomerulus
 - b. Afferent tubule
 - c. Henle's loop
 - d. The convoluted tubules
- ___ 9. The cup-shaped recesses in the center of each kidney that receive the urine from the collecting ducts are called the:
- a. hilum.
 - b. calyces.
 - c. renal sinuses.
 - d. renal pelvis.
- ___ 10. Which of the following serve(s) as a reservoir to store urine?
- a. Kidneys
 - b. Calyces
 - c. Ureters
 - d. Urinary bladder
- ___ 11. Where do the ureters enter the bladder?
- a. Posterior wall
 - b. Superior wall
 - c. Anterior wall

d. Posterosuperior wall

___ 12. The site where the ureters enter the bladder is termed the ___ junction.

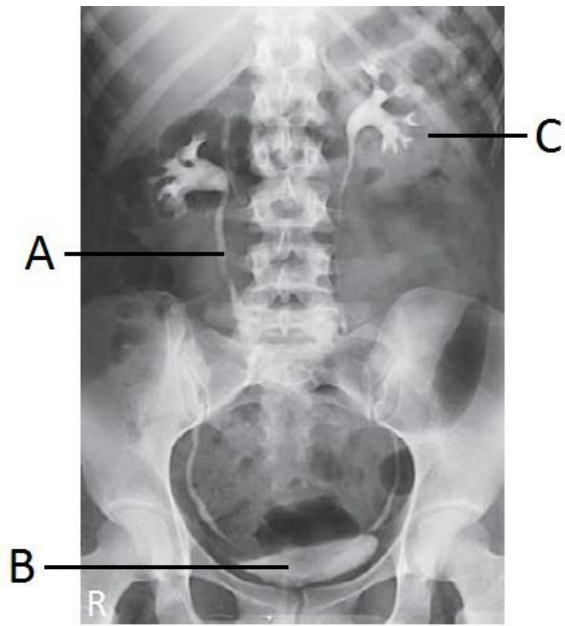
- a. ureterocalyceal
- b. cystoureteral
- c. ureterovesical
- d. ureterocystic

___ 13. The dilated, proximal portion of the ureter is labeled with an arrow. What is the name of this anatomy shown in the image from an IVU below?



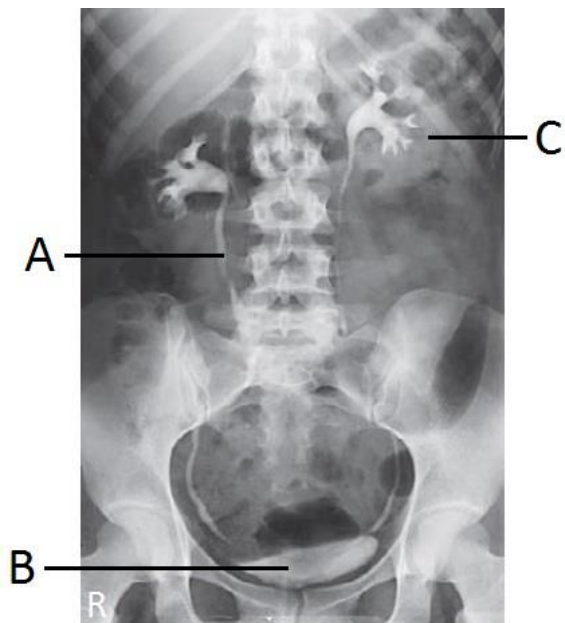
- a. Renal pelvis
- b. Hilum
- c. Calyx
- d. Trigone

___ 14. What anatomy is labeled with the letter A shown in the image from an IVU examination below?



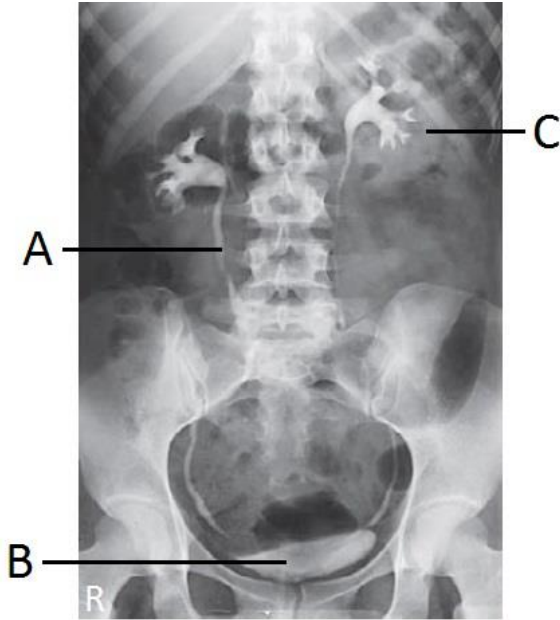
- a. Left ureter
- b. Right ureter
- c. Left renal pelvis
- d. Right renal pelvis

___ 15. Letter *B* shown in the image from an IVU examination below labels the:



- a. right renal pelvis.
- b. right ureter.
- c. urinary bladder.
- d. symphysis pubis.

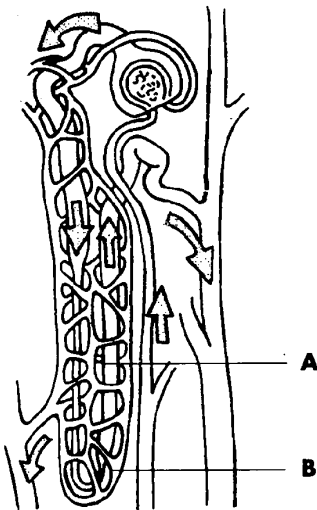
___ 16. What anatomy is indicated by letter C in the image below?



- a. Left kidney
- b. Right kidney
- c. Right renal pelvis
- d. Left renal pelvis

___ 17. The kidneys play a major role in maintaining

- a. the proper breathing rate.
- b. the proper glucose levels in the blood.
- c. homeostasis by removing urea, water, and other wastes from the blood.
- d. the concentration of digestive enzymes in the blood.



___ 18. Refer to the illustration above. The structure is known as a

- a. villus.
 - b. nephron.
 - c. ureter.
 - d. urethra.
- ___ 19. Refer to the illustration above. The structure is the basic unit of the
- a. esophagus.
 - b. pancreas.
 - c. kidney.
 - d. liver.
- ___ 20. Urine leaves the body through the
- a. ureter.
 - b. urethra.
 - c. bladder.
 - d. intestine.
- ___ 21. Hemodialysis simulates the filtering action of the
- a. urethra.
 - b. pancreas.
 - c. liver.
 - d. kidneys.
- ___ 22. A kidney dialysis machine
- a. reduces blood volume.
 - b. increases the volume of the blood.
 - c. removes wastes from the blood.
 - d. oxygenates the patient's blood.

Completion

Complete each statement.

1. Each kidney contains over 1 million blood-cleaning units called _____.
2. Urine produced in the kidneys passes into the bladder through tubes called _____.
3. A procedure for filtering the blood using a machine is called _____.

Urinary System Anatomy and Physiology Answer Section

MULTIPLE CHOICE

1. ANS: D PTS: 1 DIF: Level: Hard REF: Volume 2, Page 183
OBJ: Category: Anatomy TOP: Exam: None
2. ANS: A PTS: 1 DIF: Level: Hard REF: Volume 2, Page 184
OBJ: Category: Anatomy TOP: Exam: 2
3. ANS: C PTS: 1 DIF: Level: Medium
REF: Volume 2, Page 184 OBJ: Category: Anatomy
TOP: Exam: None
4. ANS: B PTS: 1 DIF: Level: Hard REF: Volume 2, Page 184
OBJ: Category: Anatomy TOP: Exam: None
5. ANS: A PTS: 1 DIF: Level: Medium
REF: Volume 2, Page 185 OBJ: Category: Anatomy
TOP: Exam: 1
6. ANS: B PTS: 1 DIF: Level: Medium
REF: Volume 2, Page 185 OBJ: Category: Anatomy
TOP: Exam: None
7. ANS: D PTS: 1 DIF: Level: Hard REF: Volume 2, Page 185
OBJ: Category: Anatomy TOP: Exam: 2
8. ANS: A PTS: 1 DIF: Level: Hard REF: Volume 2, Page 185
OBJ: Category: Anatomy TOP: Exam: None
9. ANS: B PTS: 1 DIF: Level: Hard REF: Volume 2, Page 185
OBJ: Category: Anatomy TOP: Exam: None
10. ANS: D PTS: 1 DIF: Level: Medium
REF: Volume 2, Page 186 OBJ: Category: Anatomy
TOP: Exam: None
11. ANS: A PTS: 1 DIF: Level: Medium
REF: Volume 2, Page 186 OBJ: Category: Anatomy
TOP: Exam: None
12. ANS: C PTS: 1 DIF: Level: Medium
REF: Volume 2, Page 186 OBJ: Category: Anatomy
TOP: Exam: None
13. ANS: A PTS: 1 DIF: Level: Hard REF: Volume 2, Page 202
OBJ: Category: Anatomy TOP: Exam: 4
14. ANS: B PTS: 1 DIF: Level: Hard REF: Volume 2, Page 202
OBJ: Category: Anatomy TOP: Exam: 4
15. ANS: C PTS: 1 DIF: Level: Hard REF: Volume 2, Page 202
OBJ: Category: Anatomy TOP: Exam: 4
16. ANS: A PTS: 1 DIF: Level: Hard REF: Volume 2, Page 202
OBJ: Category: Anatomy TOP: Exam: 4
17. ANS: C PTS: 1 DIF: II OBJ: 39.3.1
18. ANS: B PTS: 1 DIF: II OBJ: 39.3.2
19. ANS: C PTS: 1 DIF: II OBJ: 39.3.2
20. ANS: B PTS: 1 DIF: I OBJ: 39.3.4

21. ANS: D PTS: 1 DIF: I OBJ: 39.3.5
22. ANS: C PTS: 1 DIF: I OBJ: 39.3.5

COMPLETION

1. ANS: nephrons

PTS: 1 DIF: I OBJ: 39.3.2

2. ANS: ureters

PTS: 1 DIF: I OBJ: 39.3.4

3. ANS: kidney dialysis

PTS: 1 DIF: I OBJ: 39.3.5