

1. 6Which of the following arteries is a paired branch of the abdominal aorta?
  - a. **Common iliac**
  - b. Celiac trunk
    - i. Unpaired branch from the *anterior* surface of abdominal aorta
    - ii. Artery of the foregut
  - c. Superior mesenteric
    - i. Unpaired branch from the *anterior* surface of abdominal aorta
    - ii. Artery of midgut
  - d. Inferior mesenteric
    - i. Unpaired branch from the *anterior* surface of the abdominal aorta
    - ii. Artery of hindgut
  
2. The suprarenal medulla is innervated by preganglionic \_\_\_\_\_.
  - a. Superior suprarenal arteries
    - i. Blood supply to the suprarenal glands
    - ii. Branch from the inferior phrenic arteries
  - b. **Sympathetic fibers**
  - c. Inferior suprarenal arteries
    - i. Blood supply to the suprarenal gland
    - ii. Branch of the renal arteries
  - d. Parasympathetic fibers
    - i. Preganglionic parasympathetic supply to the stomach, duodenum, liver, gallbladder, pancreas, jejunum, ileum, ascending and transverse colon via the Vagus N.
    - ii. Preganglionic parasympathetic fibers to the descending and sigmoid colon, rectum, and pelvic organs arise in segments S2, 3 & 4 of the spinal cord
    - iii. Fibers enter the pelvic plexus via pelvic splanchnic nerves (parasympathetic)
    - iv. Nervus erigentes
      1. preganglionic parasympathetic fibers of the pelvic splanchnic nerves going to terminal pelvic ganglia
  
3. The apex of the renal pyramid is called a \_\_\_\_\_.
  - a. Renal column
    - i. Pyramids are separated by cortical tissue designated as renal columns
  - b. Minor calyx
    - i. Minor calyces join to form the major calyces, which form the renal pelvis (upper expanded part of the ureter)
  - c. **Papilla**
  - d. Pelvis
    - i. Renal pelvis is the upper expanded part of the ureter
    - ii. Hilus opens into the renal sinus, which contains renal vessels, nerves, lymphatics, major and minor calyces, and the renal pelvis
  
4. For the right renal artery, which statement is true?
  - a. It passes in front of the inferior vena cava
  - b. It passes in front of the abdominal aorta
    - i. Left renal vein passes in front of the aorta immediately below the origin of the superior mesenteric artery
  - c. It passes behind the abdominal aorta
  - d. **It passes behind the inferior vena cava**
  
5. The thoracic duct leaves the abdomen through the \_\_\_\_\_.
  - a. Crus of the diaphragm
    - i. Right crus arises from the bodies and discs of the upper three lumbar vertebrae
    - ii. Left crus arises from the upper two lumbar vertebrae
  - b. Medial lumbosacral arch

- i. Extend laterally from the crura across the psoas muscle
  - c. **Aortic hiatus**
  - d. Lateral lumbosacral arch
    - i. Arch over the quadratus lumborum
- 6. In the lumbar spine, sympathetic white communicating rami are at vertebral levels of \_\_\_\_\_.
  - a. T1-T12
  - b. T5-T9
  - c. **L1-L2**
  - d. L1-L5
- 7. In the diaphragm, the \_\_\_\_\_ is at the thoracic spine level 12.
  - a. **Aortic aperture**
  - b. Esophageal aperture
    - i. At the level of T10
    - ii. Esophagus passes through
  - c. Vena caval aperture
    - i. At the level of T8
    - ii. Inferior vena cava passes through
    - iii. Branches of the right phrenic nerve pass through
- 8. Which of the following muscles has origin from the sides of T12&L1, only?
  - a. Psoas major
    - i. Origin: body of T12 and bodies, discs, and TPs of all lumbar vertebrae
    - ii. Insertion: lesser trochanter of the femur
    - iii. Action: primary flexor of the thigh and flexes the lumbar spine
  - b. **Psoas minor**
  - c. Quadratus lumborum
    - i. Origin: iliolumbar ligament and adjacent part of the iliac crest
    - ii. Insertion: TPs of lumbar vertebrae and rib 12
    - iii. Action: laterally flexes trunk
  - d. Iliacus
    - i. Origin: iliac fossa
    - ii. Insertion: with psoas major on lesser trochanter of femur
    - iii. Action: flexes the thigh
- 9. Which of the following nerves is sensory, only?
  - a. Iliohypogastric
    - i. branch of the lumbar plexus (VPRs)
    - ii. T12-when present &L1
    - iii. Sensory to skin of the upper gluteal region and skin of the hypogastric region
  - b. Genitofemoral
    - i. Branch of the lumbar plexus (VPRs)
    - ii. L1 & L2
    - iii. Genital branch supplies motor to cremaster muscle: sympathetic fibers go to dartos (this part is medial)
    - iv. Femoral branch supplies the anterior surface of the thigh (this part is lateral)
  - c. **Lateral femoral cutaneous**
  - d. Obturator
    - i. Branch of the lumbar plexus (VPRs)
    - ii. L2-L4
    - iii. Motor to muscles in the medial compartment of the thigh
    - iv. Sensory to the medial side of the thigh and knee
- 10. Fibers from L4&5 (only) join to form the \_\_\_\_\_.
  - a. Lumbar plexus

- i. Formed by ventral-anterior primary rami of L1-L4
- ii. Ventral rami have anterior and posterior divisions
- iii. Lumbar plexus needs to be thought of with the sacral plexus—lumbosacral plexus
- iv. Branches
  1. iliohypogastric (see Q9)
  2. ilioinguinal
    - a. VPR L1
    - b. Sensory to skin over proximal and medial part of thigh, root of penis and scrotum in male, mons pubis and labia major in the female
  3. genitofemoral nerve (see Q9)
  4. lateral femoral cutaneous nerve
    - a. dorsal portions of VPR L2-3
    - b. passes under the inguinal ligament next to the anterior superior iliac spine
    - c. sensory to lateral thigh
  5. femoral nerve
    - a. dorsal portion of VPRs, L2-4
    - b. motor fibers in the abdomen are to the iliacus muscle
    - c. sensory to anterior thigh, medial leg and foot
  6. obturator nerve (see Q9)
  7. fibers from L4 join the anterior primary ramus of L5 to form the lumbosacral trunk of the sacral plexus
- b. Sacral plexus
- c. Lumbosacral plexus
  - i. Fibers from L4 join the anterior primary ramus of L5 to form the lumbosacral trunk of the sacral plexus
  - ii. Lumbar plexus needs to be thought of with the sacral plexus—lumbosacral plexus
- d. **Lumbosacral trunk**