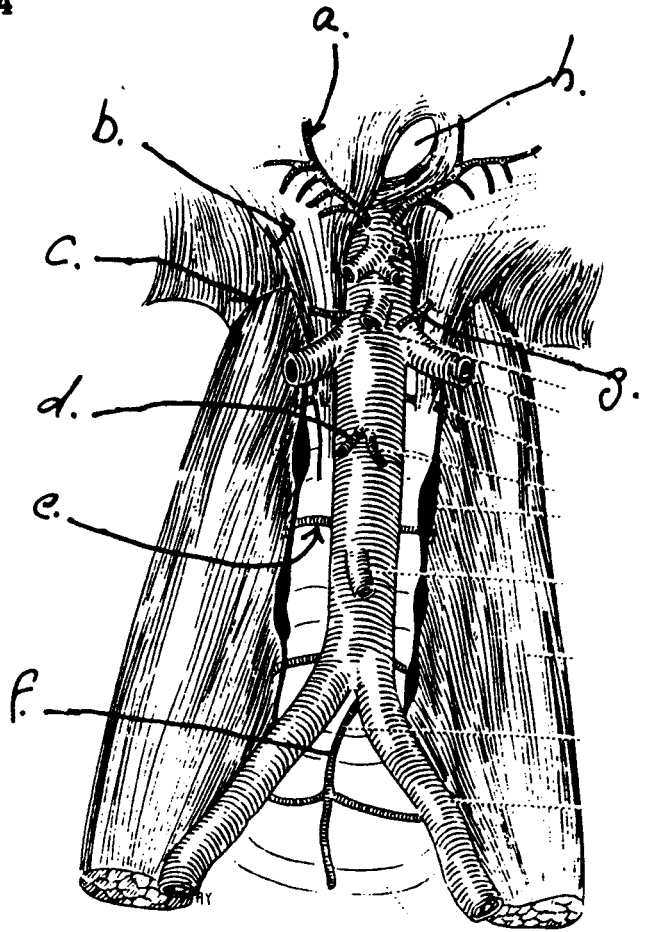


GROSS ANATOMY EXAMINATION II
 September 23, 1994

Part I. Answer in the space provided. (14 pts)

1. Identify the structures. (4 pts)

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____
- g. _____
- h. _____



2. Identify the structures. (3 pts)

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____

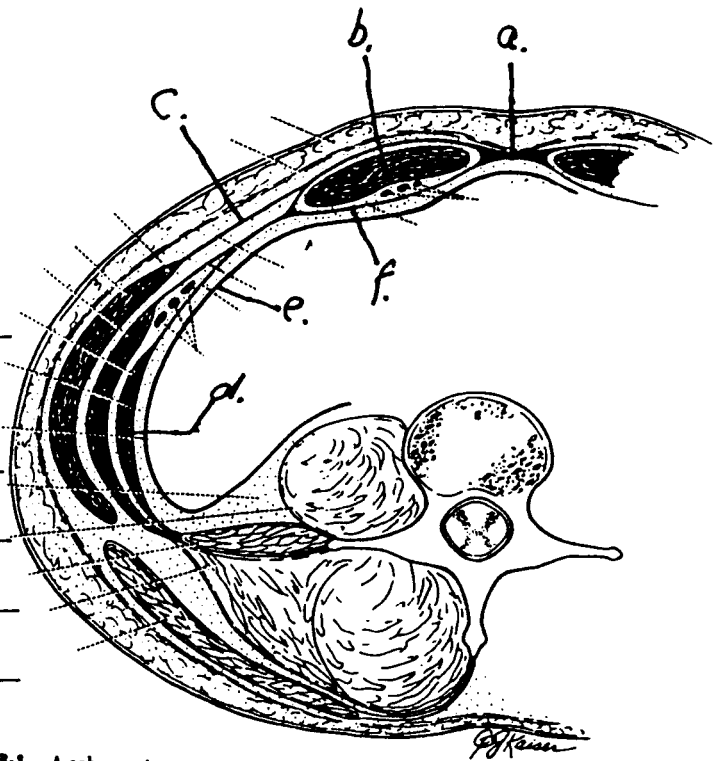


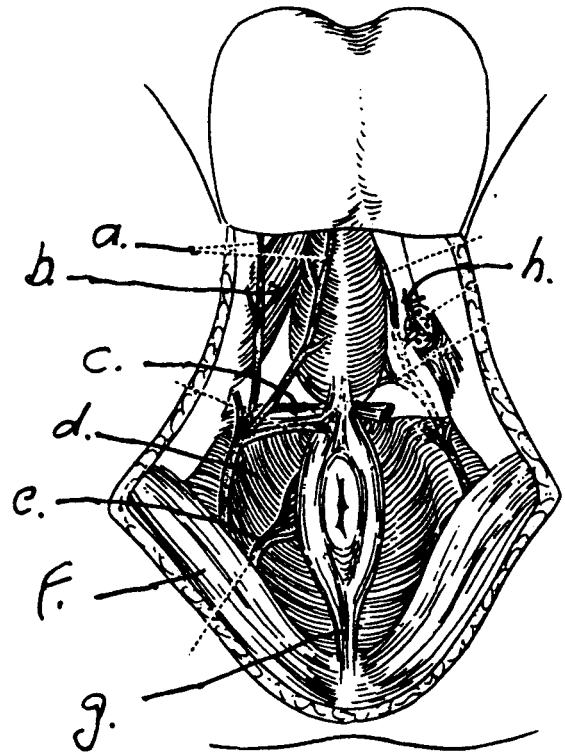
FIG. 23-1. A schematic transverse section of the abdomen to show the layers of the abdominal wall. The muscles of the anterolateral abdominal wall are shown in black; muscles associated with the vertebral column are white.

Answer in the space provided.

3. Identify the structures. (4 pts)

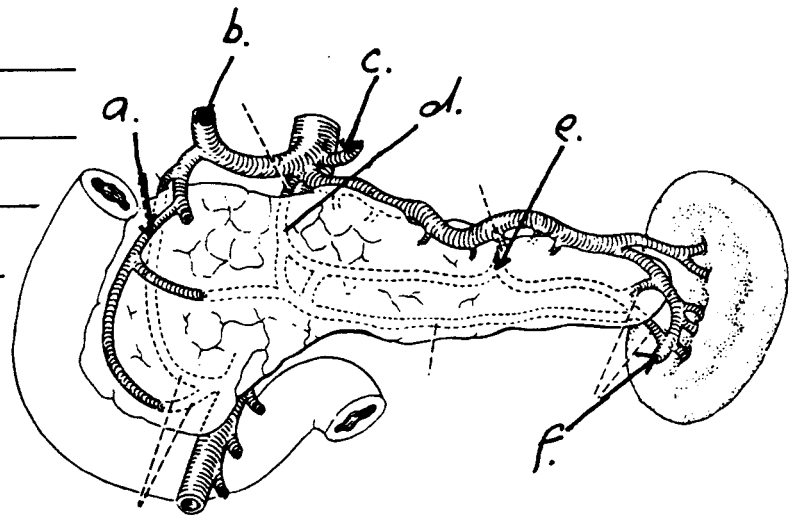
- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____
- g. _____
- h. _____

FIG. 28-22. The internal pudendal artery. The perineal artery and its branches are cut away on the right, as is most of the corpus cavernosum of the penis, to show the deep branches; the course of the artery through the urogenital diaphragm and the anterior recess of the ischioanal fossa is indicated by dotted outline.



4. Identify the structures. (3 pts)

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____



Part II. Circle the correct answer. All, none, or some may apply. (22 pts)

1. In regard to the fascia in the abdomen, pelvis, and perineum:
 - a. Camper's fascia is represented by the dartos tunic in the scrotum
 - b. The perivisceral fascia is a condensation of the transversalis fascia around pelvic organs
 - c. The arcus tendineus is an example of the thickening of the tela subcutanea
 - d. The superior fascia of the pelvic diaphragm is covered by parietal peritoneum
 - e. Buck's fascia is deep fascia located on the penis
 - f. The fundiform ligament of the penis is composed of the membranous layer of the superficial fascia

2. Pertaining to the liver:
 - a. The hepatoduodenal ligament represents peritoneum emanating from ligamentum venosum
 - b. The right hepatic vein drains into the portal vein
 - c. The coronary ligament completely covers the inferior surface of the liver
 - d. The caudate lobe of the liver serves as the superior boundary of the Epiploic foramen (of Winslow)
 - e. The vagus nerve supplies the parasympathetic innervation to the liver
 - f. Hepatic lymph nodes are located at the porta hepatis and hepatic artery

3. With respect to the nervous system:
 - a. The sympathetic nervous system innervates structures inferior to the ganglion impar
 - b. The appendix has parasympathetic innervation by the pelvic splanchnic nerves
 - c. The motor innervation to the levator ani is by way of the autonomic nervous system
 - d. The superior hypogastric plexus is continuous with the intermesenteric plexus and is located at the bifurcation of the aorta
 - e. The great splanchnic nerve pierces the diaphragm with the inferior vena cava at T8
 - f. For defecation to proceed, the sphincter urethrae muscle of the urogenital diaphragm must receive parasympathetic stimulation by the pelvic splanchnic nerves

Circle the correct answer. All, none, or some may apply.

4. The lienorenal ligament contains the following structures:
 - a. Tail of the pancreas
 - b. Splenic artery
 - c. Splenic vein
 - d. Short gastric arteries
 - e. Lumbocostal trigone
 - f. Left suprarenal gland

5. In regard to the embryology of the gastrointestinal tract:
 - a. The lesser omentum is a derivative of the ventral mesentery
 - b. The gastrointestinal tract herniates into the umbilicus beginning the 10th week of fetal life
 - c. The sigmoid mesocolon is a derivative of the dorsal mesentery
 - d. The stomach undergoes a 90° clockwise rotation during embryological development, placing the greater curvature to the left and the lesser curvature to the right
 - e. The umbilical arteries conduct fresh, oxygenated blood from the maternal to the fetal circulation
 - f. Meckel's diverticulum represents the persistence of part of the vitelline duct and is located in the ileum

6. With respect to the vasculature in the abdomen and pelvis:
 - a. The left pampiniform plexus of veins drains into the left testicular vein
 - b. The celiac artery lies at vertebral level T10
 - c. The aorta bifurcates at vertebral level L2
 - d. The left testicular vein drains into the left renal vein
 - e. The celiac, superior mesenteric, and inferior mesenteric arteries all typically contribute to the marginal artery
 - f. The left gastroepiploic artery is located in the transverse mesocolon

7. Which of the following statements are true:
 - a. Carcinoma above the pectinate line involves columnar or cuboidal epithelia
 - b. The false pelvis is deeper in the female
 - c. The left ovary has an epithelial surface that is covered transversalis fascia
 - d. The iliohypogastric nerve travels through the inguinal canal
 - e. The contents of indirect hernias that descend into the scrotum will be located between the internal spermatic fascia and the tunic vaginalis
 - f. Direct inguinal hernias involve the protrusion of the transversalis fascia
 - g. The visceral peritoneum is innervated by general somatic afferent nerves
 - h. Anal columns are horizontal ridges that form the pecten line

Part III. Discuss the following. (12 pts)

a. Autonomous (neurogenic) bladder (3 pts)

b. Right crus of diaphragm (3 pts)

c. Cutaneous innervation of scrotum (3 pts)

d. Medial inguinal fossa (3 pts)

Part IV. Answer in the space provided. (30 pts)

a. During catheterization of the penis, a tear in the superior fascia of the urogenital diaphragm results. Extravasation of urine into the ischiorectal fossa occurs. (10 pts)

i. Define the boundaries and contents of the ischiorectal fossa.

ii. Explain why urine can easily pass between the anterior and posterior recesses. (Define these recesses)

iii. Discuss why urine cannot pass into the superficial pouch.

iv. Discuss why urine is located in the deep pouch.

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Answer in the space provided.

- b. There is a "predilection of gastric carcinoma to spread along lymphatics" (Hollinshead and Rosse, Pg. 632). Define the lymphatic drainage of the stomach. (6 pts)
- c. Explain why the transversus abdominis muscle does not contribute a tunic to the spermatic cord. (3 pts)
- d. Describe an anatomical condition that could cause symptoms of vomiting paired with left renal failure. (3 pts)

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Answer in the space provided.

e. Explain the anatomy of the "Caput Medusae" that results from portal hypertension. (4 pts)

f. Discuss the parasympathetic innervation to structures composing the hindgut. (4 pts)

Part V. Discuss the anatomy of the 2nd part of the duodenum. (10 pts)

i. Relationships and Boundaries

ii. Contents and Special Features

iii. Vascular Supply

iv. Innervation

Part VI. Indicate your understanding of the following. (12 pts)

a. Perineal body (Central tendon)

b. Lower (inferior) recess of omental bursa (lesser sac)

c. Cremasteric reflex

d. Arcuate line of anterior abdominal wall