

EXAM NUMBER _____
 GROSS ANATOMY EXAMINATION II
 SEPTEMBER 22, 1995

PART I. Answer in the space provided. (15 pts.)

1. Identify the structures. (2 pts.)

- a. Hepato gastric ligament (Lesser omentum)
- b. GASTROSPLENIC ligament (Gastrosplenic)
- c. Splenorenal ~~ligament~~ ligament (lienorenal)
- d. AORTA

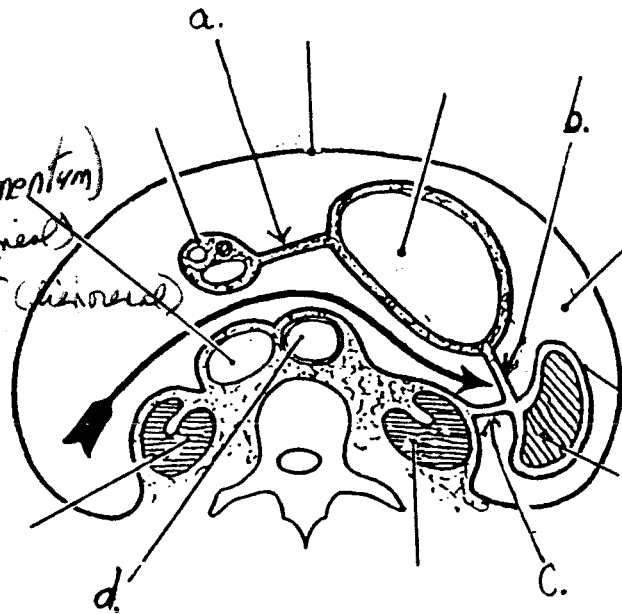


Figure 2. 26. Horizontal extent of omental bursa (lesser sac)

2. Identify the gutter in (a) and the structure in (b). (1 pt.)

- a. Right lateral (PARACOLIC) (right colic gutter)
- b. Phrenicocolic ligament

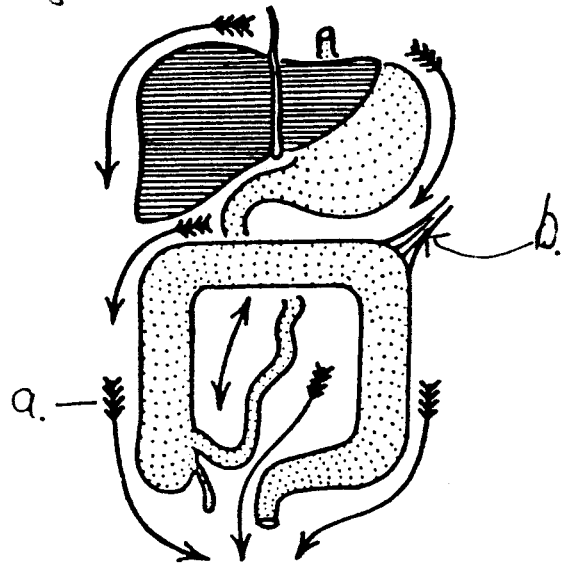


Figure 2. 29. Gutters in the peritoneal cavity.

Part 1. Answer in the space provided.

3. Identify the structures. (3 pts.)
- a. Inferior Mesenteric Artery
 - b. Internal iliac artery
 - c. Inferior epigastric artery
 - d. Round ligament (ligamentum teres) (spermatic cord)
 - e. Deep circumflex iliac artery
 - f. Ureter

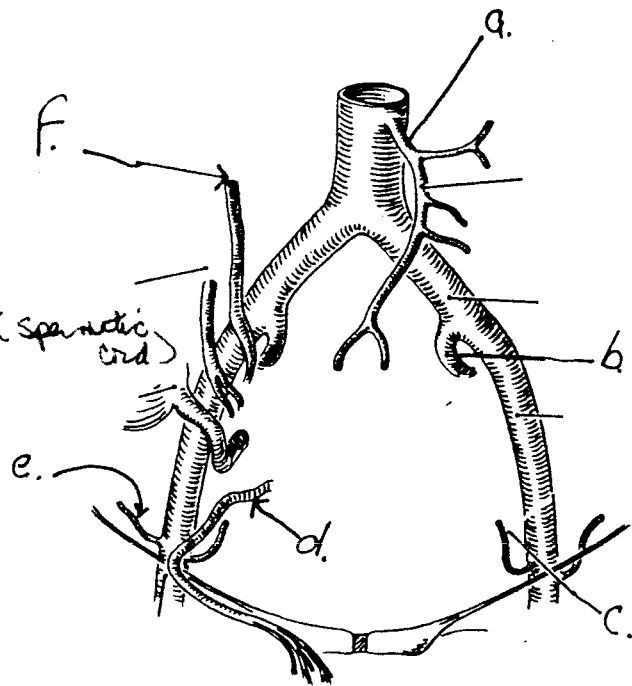


Figure 3. 37. Structures crossing the iliac arteries to enter or leave the pelvis.

4. In the fetus, name the structures. (3 pts.)
- a. Arcuate Line
 - b. Inferior epigastric artery
 - c. Umbilical arteries
 - d. Medial inguinal fossa
 - e. Urachus
 - f. Rectus abdominis (muscle)

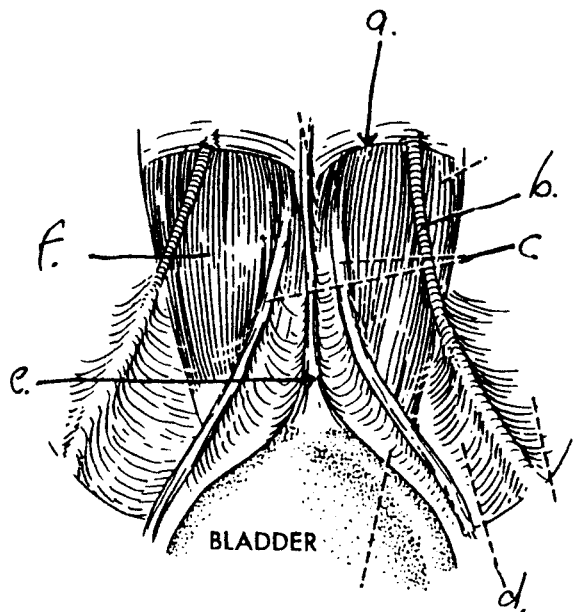


FIG. 23-26. View of the posterior surface of the lower part of the anterior abdominal wall, showing the structures that produce the folds and fossae related to the bladder and inguinal region.

Part 1. Answer in the space provided.

5. Identify the structures. (2 pts.)

- a. Right gastric artery
- b. Common hepatic artery
- c. Anterior Superior Mesenteric artery
- d. Right gastroepiploic artery

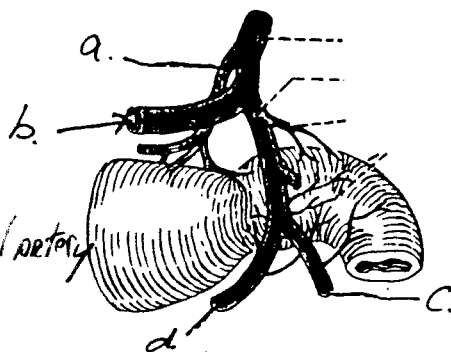
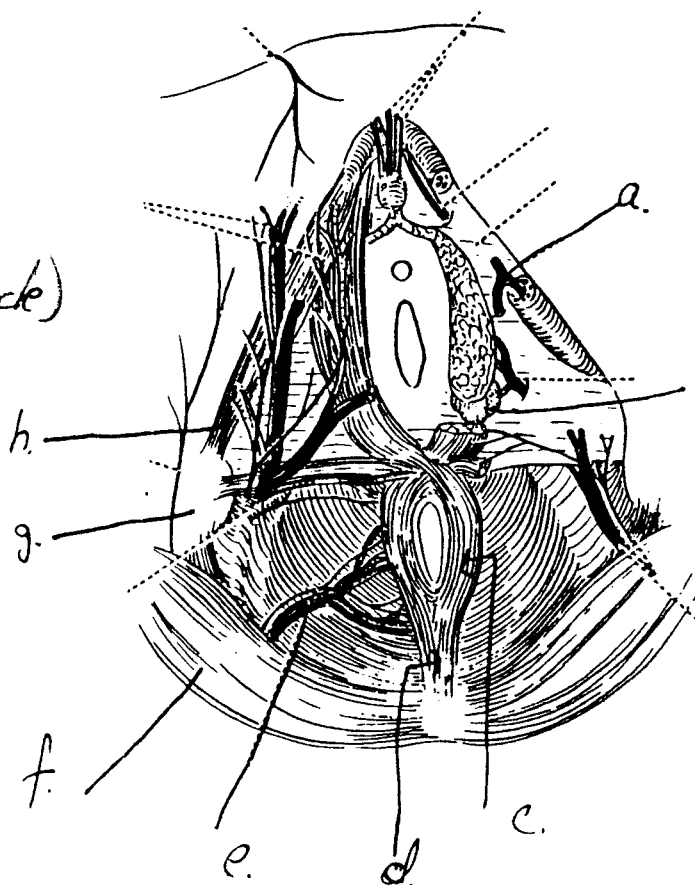


FIG. 24-23. posterior view of the blood supply to the first part of the duodenum.

6. Identify the structures. (4 pts.)

- Fig. 28-23*
- a. Deep artery (of clitoris)
 - b. Greater vestibular gland
 - c. External anal sphincter (muscle)
 - d. Anococcygeal raphe
 - e. Inferior rectal vessels
 - f. Gluteus maximus (muscle)
 - g. Ischial tuberosity
 - h. Ischiocondrymus (muscle)



PART II: Circle the correct answer(s). All, none, or some may apply. (19 pts.)

1. In regard to the fascia in the abdomen, pelvis, and perineum:
 - a. The parietal pelvic fascia of the pelvis is an extension of the transversalis fascia of the abdomen.
 - b. The obturator fascia has a thickening called the arcuate line.
 - c. The superior fascia of the pelvic diaphragm is a condensation of the extraperitoneal connective tissue.
 - d. The perivesical fascia is related to the extraperitoneal connective tissue.
 - e. The transversalis fascia originates from the thoracolumbar fascia.

2. With regard to development of the gastrointestinal tract:
 - a. The inferior mesenteric artery can be considered the axis of rotation of the gastrointestinal tract.
 - b. The gastrointestinal tract undergoes a 270° counterclockwise rotation during embryonic week 5.
 - c. The stomach undergoes a 90° clockwise rotation during development.
 - d. The greater omentum is derived from the ventral mesentery.
 - e. Meckel's diverticulum in adults is located in the ileum approximately 2 to 3 feet from the ileocecal junction and is related to the persistence of the urachus.

3. With regard to the kidneys:
 - a. The renal fascia is a condensation of the extraperitoneal connective tissue.
 - b. The ureter lies ventral (anterior) to the renal artery.
 - c. The renal columns terminate in the medulla as renal papilla.
 - d. The right renal artery passes behind the inferior vena cava.

4. With respect to the inguinal region:
 - a. Indirect inguinal hernias occur in the lateral inguinal fossa.
 - b. The contents of a descended indirect inguinal hernia lie within the tunica albuginea of the testis.
 - c. Direct inguinal hernias do not involve the transversalis fascia.
 - d. The cremaster artery arises from the inferior epigastric artery.

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

5. With regard to the diaphragm:

- a. The hiatus of the inferior vena cava is formed by the right crus.
- b. The greater splanchnic nerve passes from the thorax to the abdomen by way of the aortic hiatus.
- c. The azygous vein passes upward from the abdomen to the thorax through the aortic hiatus.
- d. An esophageal or hiatal hernia, whereby parts of the cardia and fundus of the stomach slide upward through an enlarged esophageal hiatus, occurs at the level of the tenth thoracic vertebra.

6. With respect to the liver:

- a. The hepatic veins drain into the portal vein.
- b. According to internal morphology of the liver, the quadrate lobe and a part of the caudate lobe belong to the left lobe.
- c. The left triangular ligament is formed by the peritoneum.
- d. Cancerous growths of the right lobe of the liver may cause problems to the right kidney.

7. In regard to the pectinate line:

- a. Is a region that may be involved in portal hypertension.
- b. Dilated and redundant veins below this line are referred to as external hemorrhoids.
- c. Is located just above the anal columns.
- d. The region above (superior) this line is supplied with afferent innervation by somatic nerve fibers of the pudendal nerve.

8. With respect to the female pelvis:

- a. The pelvic inlet is usually oval.
- b. The subpubic angle is wider than in the male.
- c. The pelvic outlet is larger than in the male.
- d. The false pelvis is deeper than in the male.

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

9. With regard to the pelvic nerves and vessels:

- a. An automatic "cord" bladder results when spinal cord transection occurs superior to S2-4.
- b. The "nervi erigentes" refers to the somatic afferents in the pudendal nerve that are sensitive to touch.
- c. During urination, the neck of the bladder is allowed to extend by a relaxation of the pelvic diaphragm.
- d. Defecation includes reflex arcs involving the parasympathetics and the pudendal nerve.