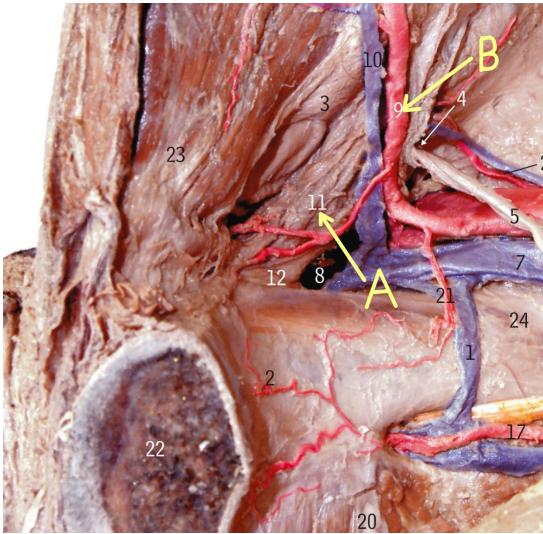


Key AC SPOT 80

3050118 Gastrointestinal System I

Detailed Key : https://docs.google.com/document/d/1OsP4ulKDzMXYW4chGyUFeXeYvsDwS5-ce8_54E-9vic/edit?usp=sharing

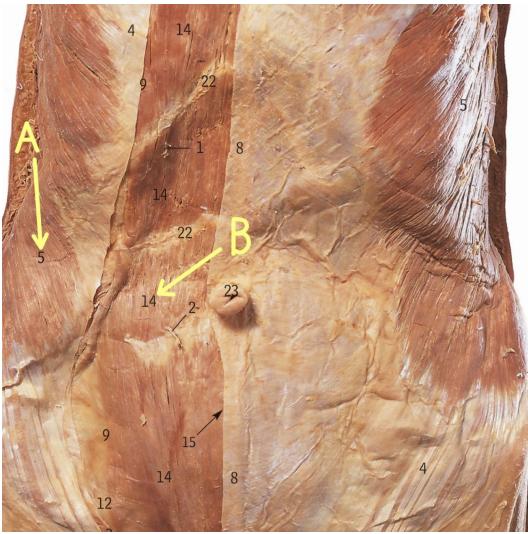
Station 1



1. Identify structure A (11)
 - A. Superior epigastric artery
 - B. **Inguinal ligament**
 - C. Inferior epigastric artery
 - D. Lacunar ligament

2. Identify structure B (9)
 - A. Superior epigastric artery
 - B. Inguinal ligament
 - C. **Inferior epigastric artery**
 - D. Lacunar ligament

Station 2



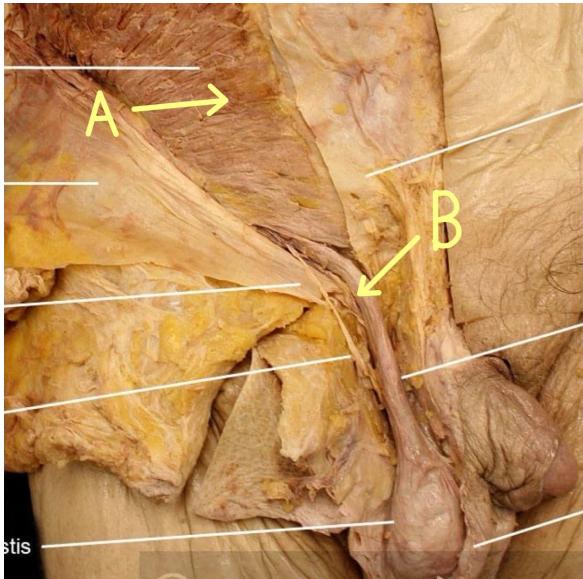
3. Identify structure A (5)

- A. External Oblique muscle
- B. Internal Oblique muscle
- C. Rectus Abdominis muscle
- D. Transversus Abdominis muscle

4. Identify structure B (14)

- A. External Oblique muscle
- B. Internal Oblique muscle
- C. Rectus Abdominis muscle
- D. Transversus Abdominis muscle

Station 3



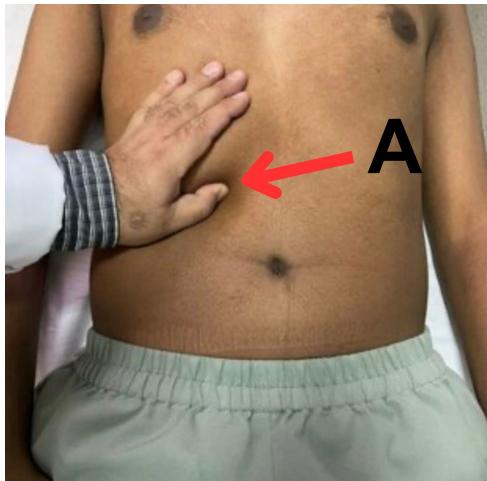
5. Identify structure A

- A.External Oblique muscle
- B.Internal Oblique muscle
- C.Rectus Abdominis muscle
- D.Transversus Abdominis muscle

6. Identify structure B

- A. Small intestine
- B. Round ligament of ovary
- C. Inguinal ligament
- D. Spermatic cord

Station 4



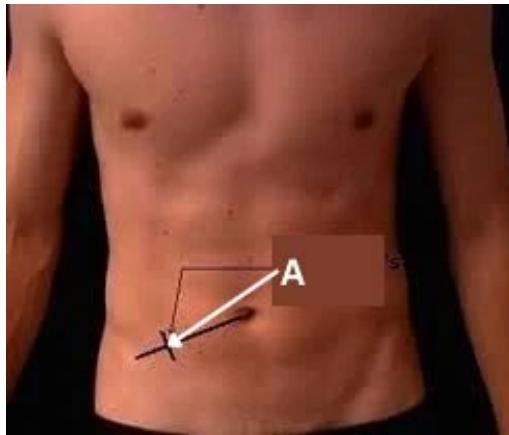
7. Identify landmark A

- A. Murphy's point
- B. McBurney's point
- C. McDouglas's point
- D. Murmur's point

8. Which structure lies underneath landmark A

- A. pancreas
- B. Vermiform appendix
- C. Urinary bladder
- D. Gallbladder

Station 5



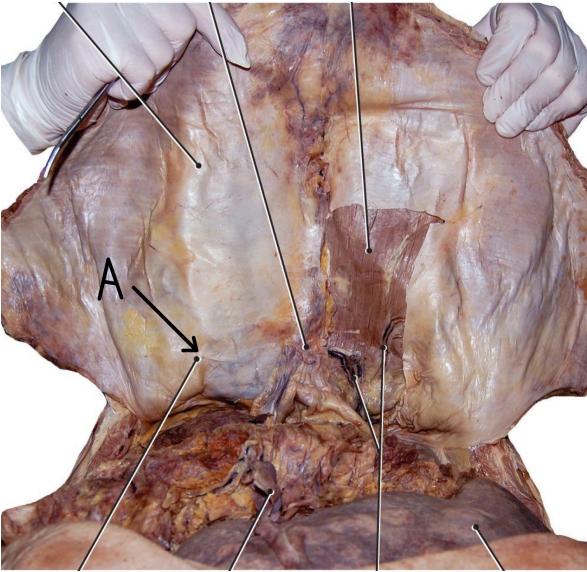
9. Identify landmark A

- A. Murphy's point
- B. McBurney's point
- C. McDouglas's point
- D. Murmur's point

10. Which structure lies underneath landmark A

- A. pancreas
- B. Vermiform appendix
- C. Urinary bladder
- D. Gallbladder

Station 6



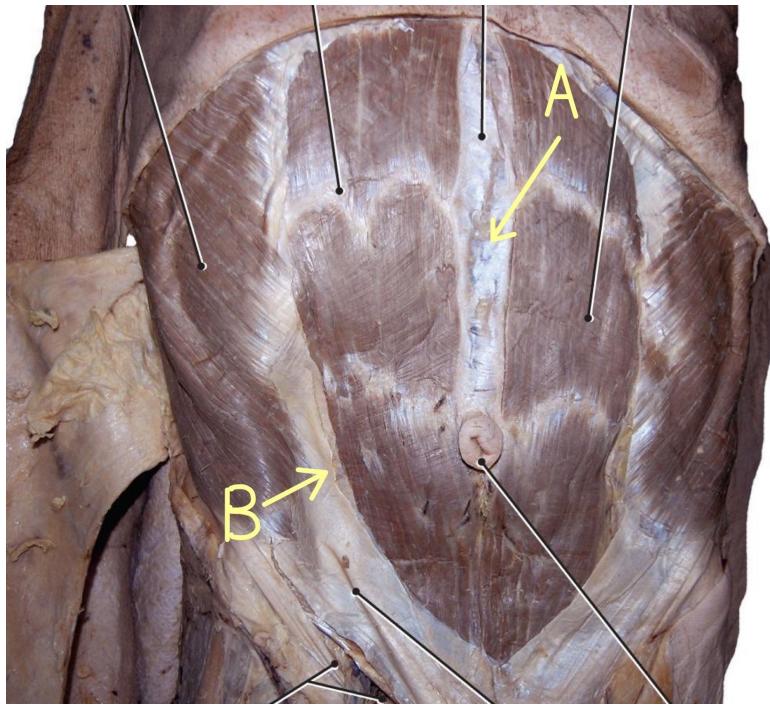
11. Identify structure A

- A. Median umbilical fold
- B. Medial umbilical fold
- C. Lateral umbilical fold
- D. Spermatic cord

12. Which structure lies underneath structure A

- A. Inferior mesenteric artery
- B. Superior mesenteric artery
- C. Obliterated umbilical artery
- D. Vas deferens

Station 7



13. Identify structure A
- A. Arcuate line
 - B. Linea semilunaris
 - C. Tendinous intersection
 - D. Linea alba

14. Identify structure B
- A. Tendinous intersection
 - B. Linea semilunaris
 - C. Linea semicircularis
 - D. Linea alba

Station 8



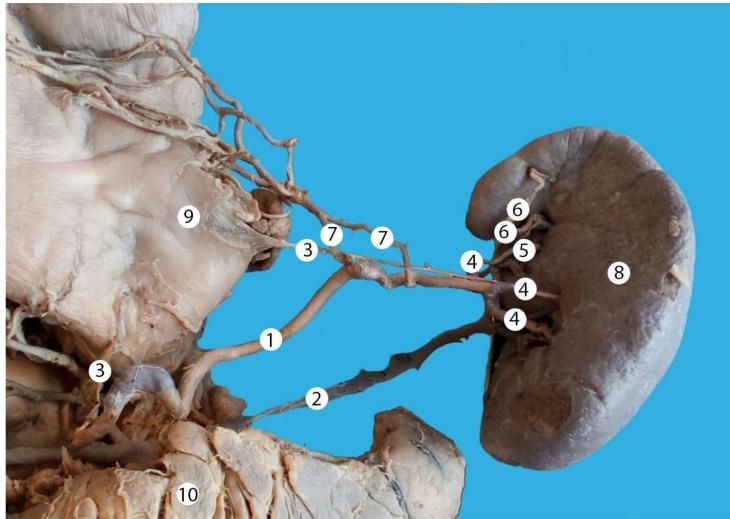
15. Identify structure 30.

- A. Splenic artery
- B. Common hepatic artery
- C. Left gastric artery
- D. **Gastroduodenal artery**

16. Which organ is not supplied by this artery?

- A. Stomach
- B. Pancreas
- C. **Liver**
- D. Duodenum

Station 9



17. Identify structure 1.

- A. Splenic artery
- B. Common hepatic artery
- C. Left gastric artery
- D. Gastroduodenal artery

18. Which organ is not supplied by this artery?

- A. Stomach
- B. Pancreas
- C. Spleen
- D. Duodenum

Station 10



19. Identify structure 3.

- A. Fundus of the stomach
- B. Body of the stomach
- C. Pylorus of the stomach
- D. Cardia of the stomach

20. What is the function of this structure?

- A. A storage of food after meal
- B. Secretion of intrinsic factor for vitamin B12 absorption
- C. Primary site for enzymatic digestion of carbohydrates
- D. Mechanical digestion through strong peristaltic contractions

Station 11



21. Identify structure 22.

- A. Pyloric sphincter
- B. Duodenum**
- C. Angularis incisura
- D. Pyloric orifice

22. Which artery supplies this structure?

- A. Right gastro-omental artery
- B. Right gastric artery
- C. Supraduodenal artery**
- D. Left gastric artery

Station 12



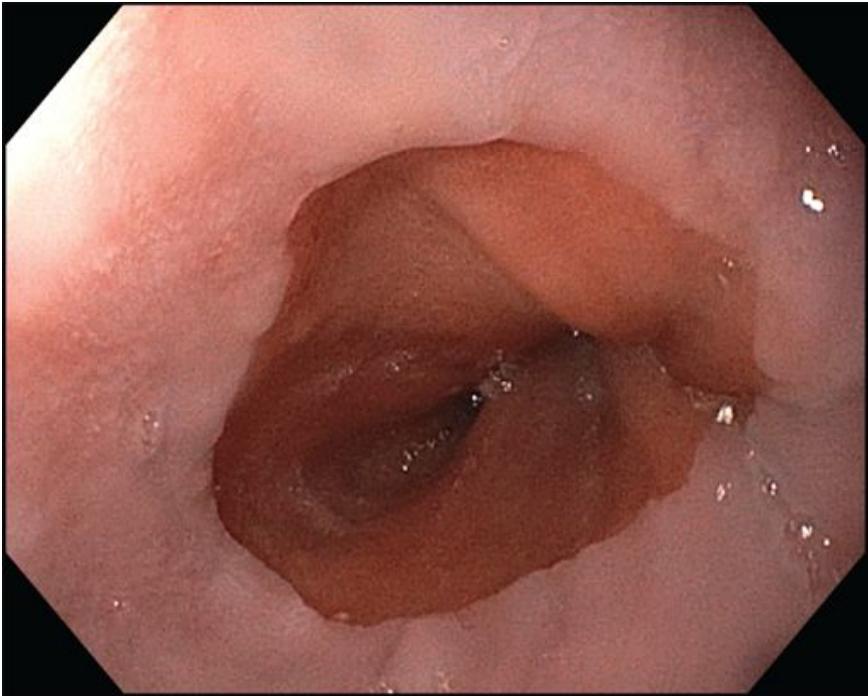
23. What is this?

- A. Major duodenal papilla
- B. Minor duodenal papilla
- C. Haustra
- D. Gastric rugae

24. What is its function?

- A. Provides a shared opening for the common bile duct and main pancreatic duct to deliver alkaline secretions into the descending duodenum.
- B. Serves as the primary conduit for the accessory pancreatic duct (Santorini) to release enzymes during pancreatic insufficiency.
- C. Facilitates vitamin B12 absorption through intrinsic factor binding at this specific mucosal site.
- D. Secretes bicarbonate-rich fluid to neutralize acidic chyme entering from the stomach.

Station 13



B

Source: Longo D, Fauci A, Kasper D, Hauser S, Jameson JL, Loscalzo J, Holland S, Langford C: Harrison's Principles of Internal Medicine, 22nd Edition
Copyright © McGraw Hill. All rights reserved.

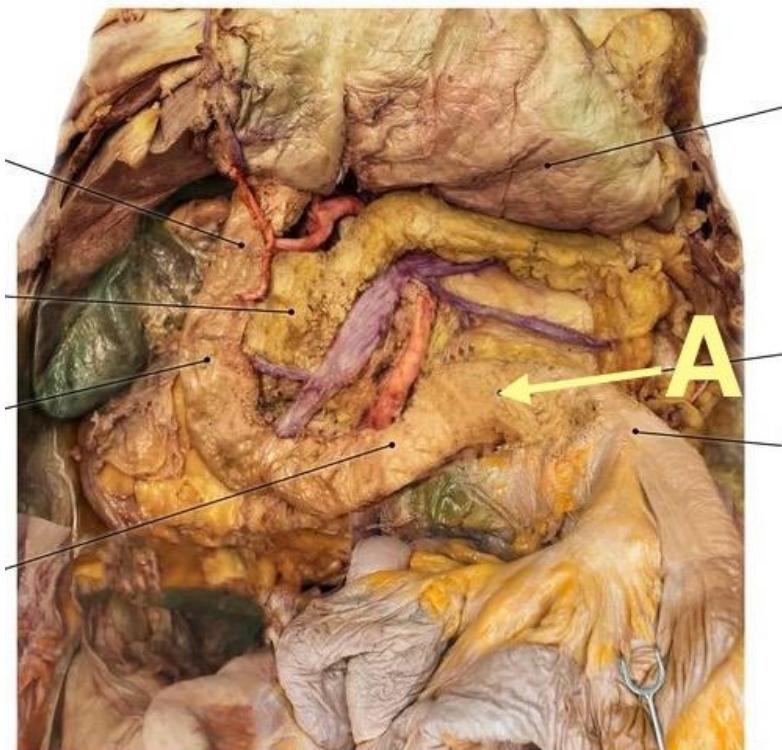
25. What is this?

- A. Esophagogastric junction
- B. Gastroduodenal junction
- C. Duodenojejunal junction
- D. Ileocecal junction

26. What is its function?

- A. Prevent reflux of chyme from the stomach back into the esophagus.
- B. Prevent reflux of chyme from the duodenum back into the stomach.
- C. Prevent reflux of chyme from the jejunum back into the duodenum.
- D. Prevent reflux of fecal contents from the colon into the ileum.

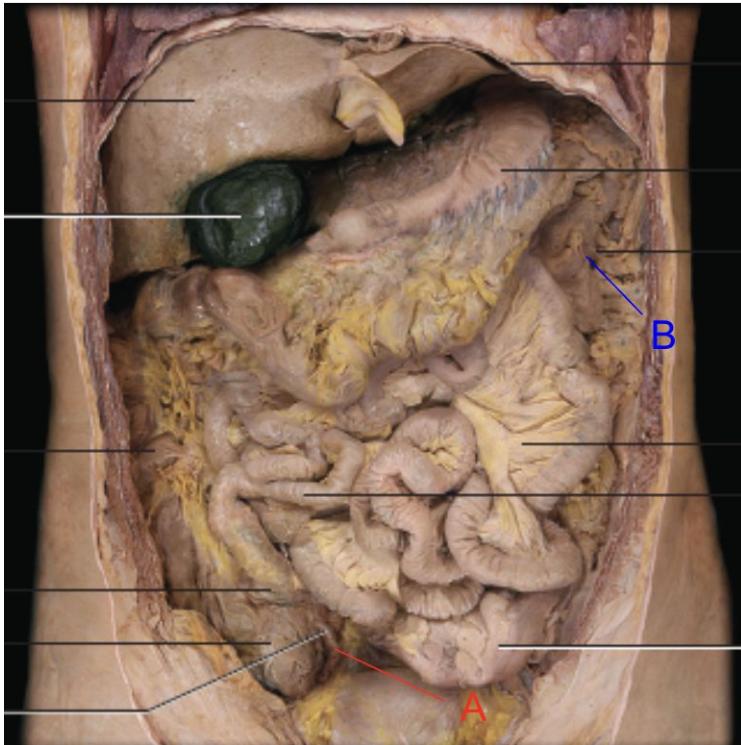
Station 14



27. Identify structure A.
- A. 1st part of duodenum
 - B. 2nd part of duodenum
 - C. 3rd part of duodenum
 - D. 4th part of duodenum

28. Which nerve innervates this structure?
- A. Vagus nerve via the celiac plexus
 - B. Greater splanchnic nerve
 - C. Pelvic splanchnic nerve
 - D. Lesser splanchnic nerve

Station 15



A = Vermiform appendix

B = Descending colon

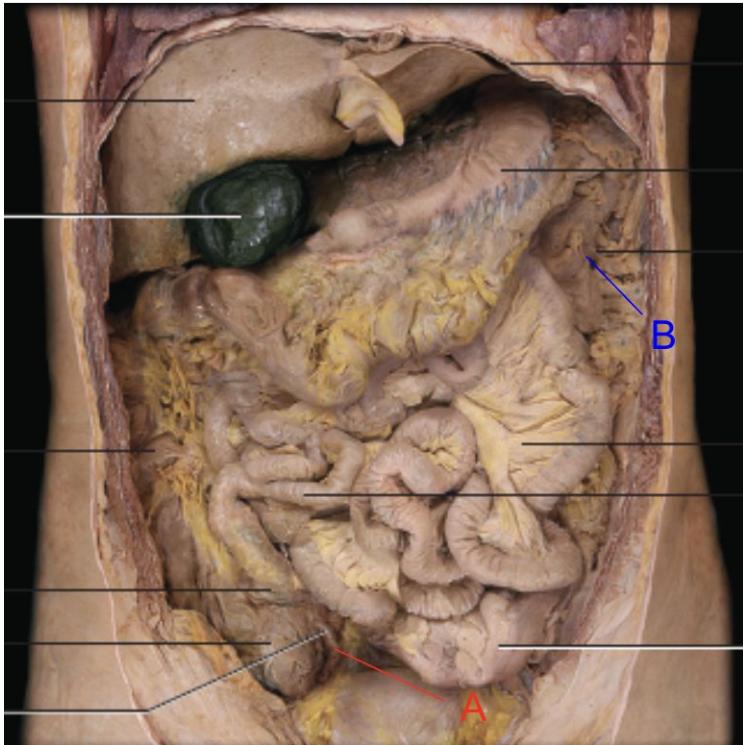
29. Which artery supplies structure A

- a. Inferior mesenteric artery
- b. Middle colic artery
- c. Appendicular artery
- d. Right gastric artery

30. Which artery supplies structure B

- a. Superior mesenteric artery
- b. Inferior mesenteric artery
(L colic มากจาก IMA)
- c. Middle colic artery
- d. Right colic artery

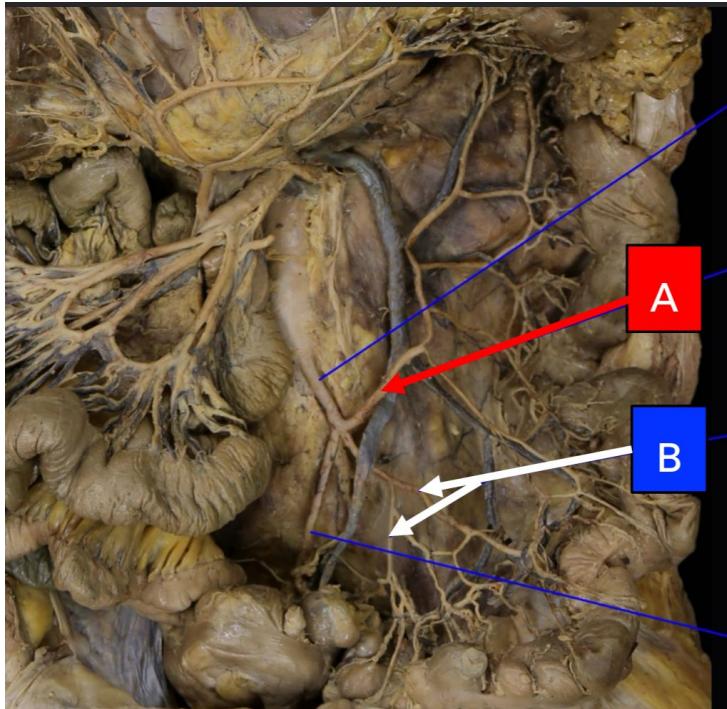
Station 16



31. Identify structure A
- A. Mesoappendix
 - B. Vermiform appendix
 - C. Appendicular artery
 - D. Omental appendix

32. Which part of the gut this structure comes from?
- A. Foregut
 - B. Midgut
 - C. Hindgut
 - D. Vitelline Duct

Station 17



A = L colic a.

B = Sigmoidal a.

33. Arteries B stem from which artery

- a. Superior mesenteric artery
- b. **Inferior mesenteric artery**
- c. Internal iliac artery
- d. Common iliac artery

34. What is the peritoneal classification of the structure supplied by arteries B?

- A. **Intraperitoneum**
- B. Retroperitoneum
- C. Intraperitoneum and Retroperitoneum
- D. Extraperitoneum

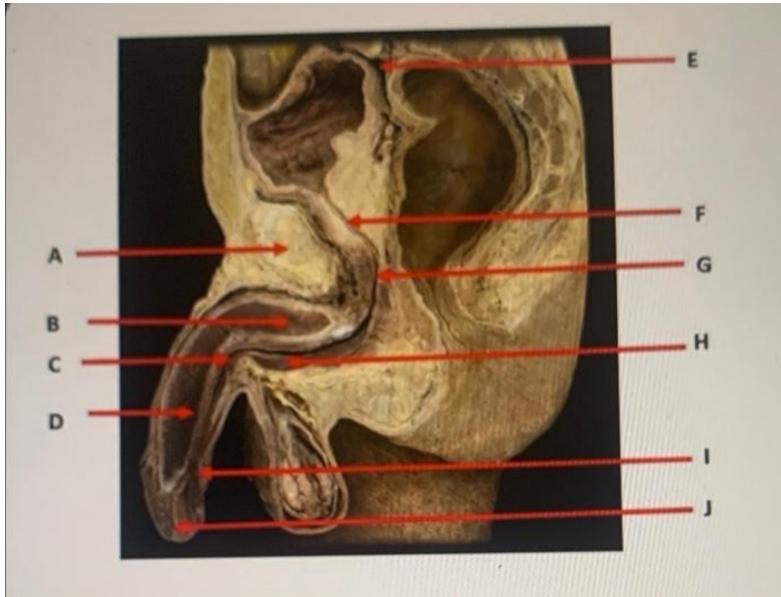
Ascending = retro

Transverse = intra

Descending = retro

Sigmoid = intra

Station 18



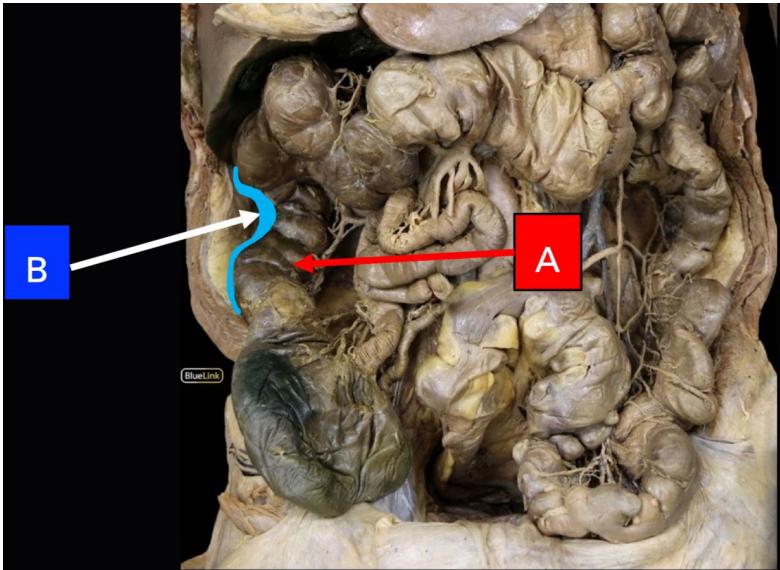
35. Identify structure E

- a. Pararectal fossa
- b. Rectouterine pouch
- c. **Rectovesical pouch**
- d. Vesicouterine pouch

36. Which structures are associated with structure E

- a. Rectum and Urinary bladder
- b. Rectum and Uterus
- c. Rectum and Ureter
- d. Urinary bladder and Uterus

Station 19



37. Identify structure B

- a. Right infracolic space
- b. Left infracolic space
- c. **Right paracolic gutter**
- d. Left paracolic gutter

38. Which structures is associated with structure B

- a. **Ascending colon**
- b. Transverse colon
- c. Descending colon
- d. Sigmoid colon

Station 20



Ileum

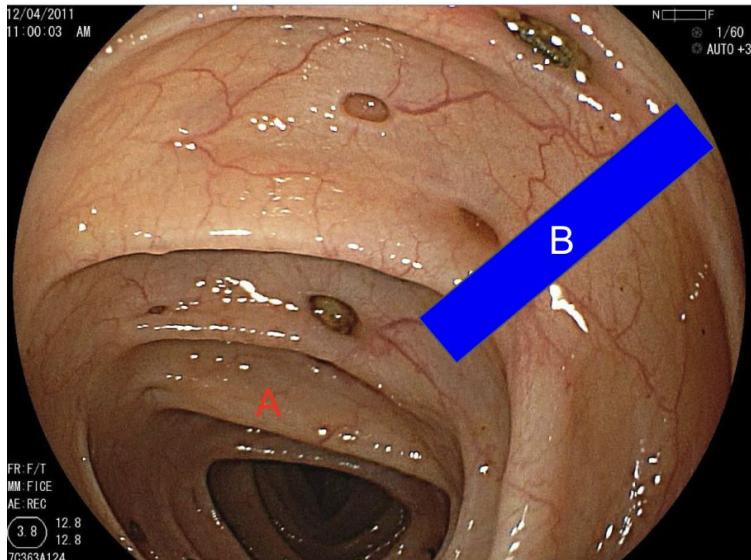
39. Identify this structure

- A. Esophagus
- B. Stomach
- C. Small bowel
- D. Colon

40. What is the function of this structure

- a. Neutralizes gastric acid and receives bile and pancreatic enzymes
- b. Absorbs most nutrients including carbohydrates and proteins
- c. Absorbs vitamin B12 and bile salts
- d. Reabsorbs water and electrolytes, and forms feces

Station 21



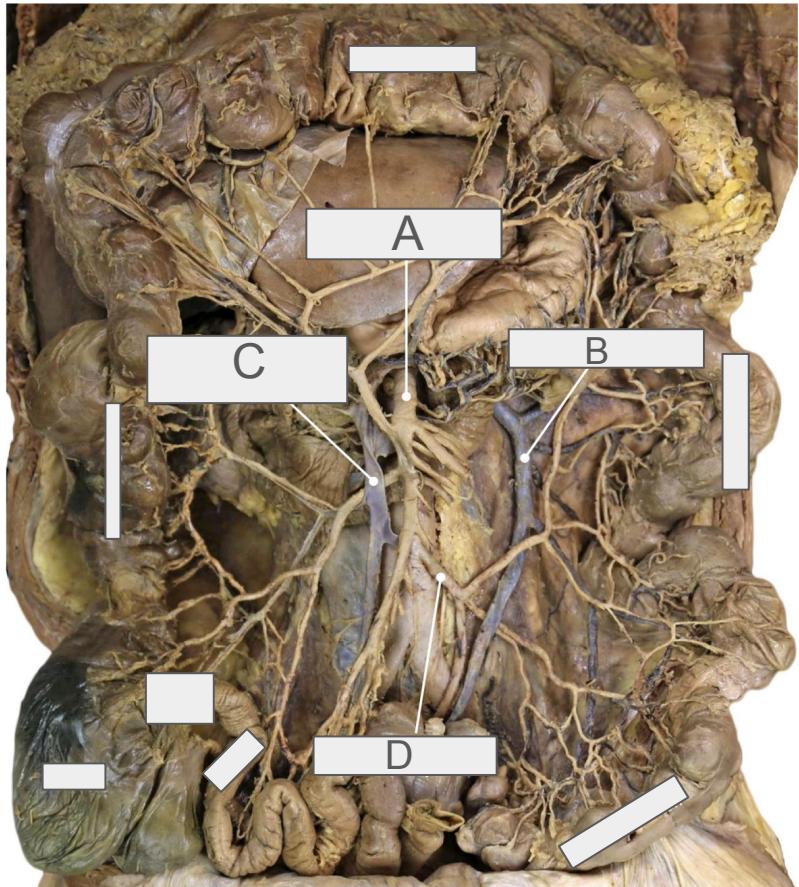
41. Identify structure A

- A. Plicae circulares
- B. Plicae semicircularis
- C. Plicae lunaris
- D. Plicae semilunaris

42. Which structure lines under B

- a. Taenia coli
- b. Omental appendices
- c. Plicae circulares
- d. Mesocolon

Station 22



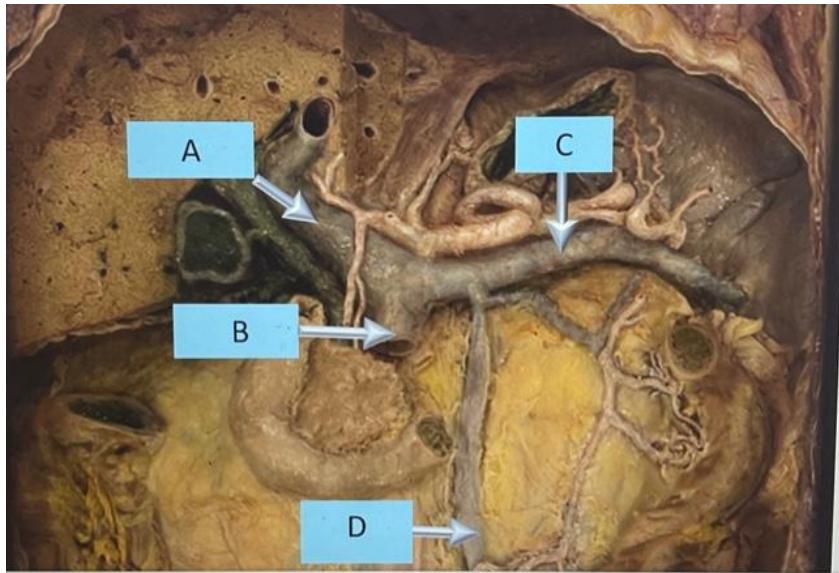
43. Identify superior mesenteric artery **A**

44. Identify superior mesenteric vein **C**

B = IMV

D = IMA

Station 23



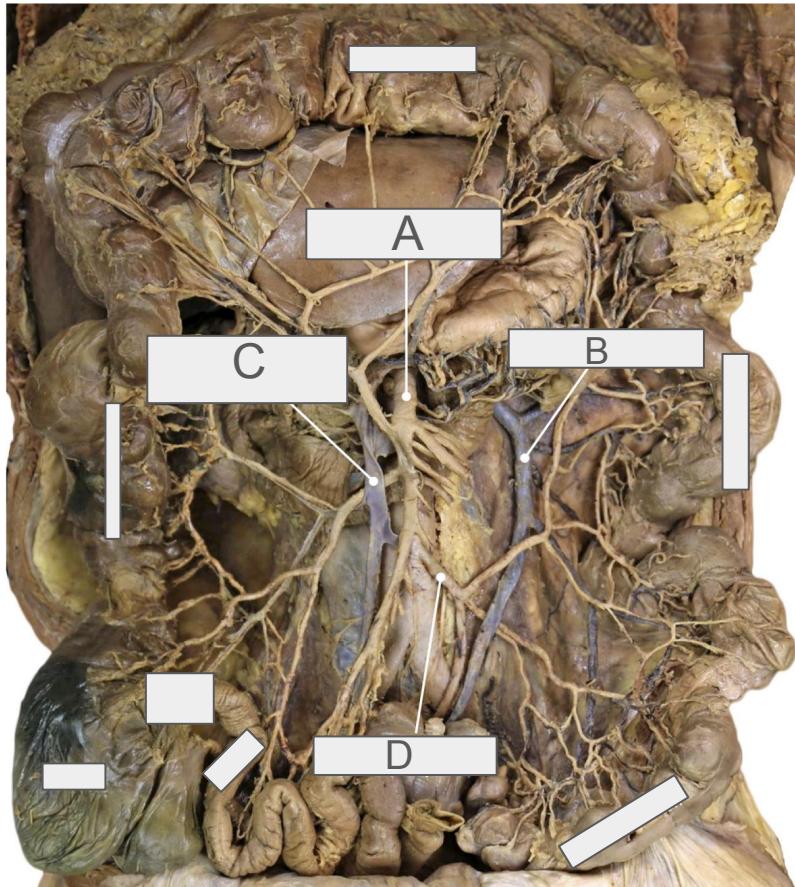
45. Identify inferior mesenteric vein **D**

46. Identify splenic vein **C**

A = Portal v.

B = SMV

Station 24



47. Identify structure B

- 1.Superior mesenteric artery
- 2.Inferior mesenteric artery
- 3.Superior mesenteric vein
- 4.**Inferior mesenteric vein**

48. Identify structure D

- 1.Superior mesenteric artery
- 2.**Inferior mesenteric artery**
- 3.Superior mesenteric vein
- 4.Inferior mesenteric vein

Station 25

A



49. Identify structure A

- 1.Celiac plexus
- 2.Tumor
- 3.Sympathetic nerve
- 4.Intermesenteric plexus

50. Which structure does it get sympathetic nerves from?

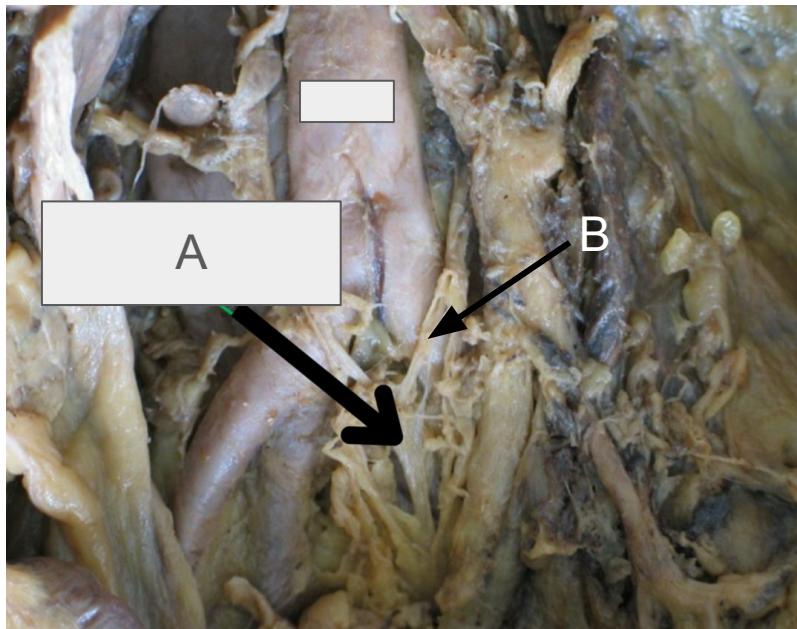
- 1.Greater splanchnic nerve
- 2.Lesser lumbar splanchnic nerve
- 3.Least lumbar splanchnic nerve
- 4.Vagus nerve

greater splanchnic n. → celiac plexus

upper 2 lumbar splanchnic n. → intermesenteric plexus

lower 2 lumbar splanchnic n. → sup. hypogastric plexus → hypogastric n.

Station 26



51. Identify structure A

1.Celiac plexus

2.Intermesenteric plexus (เหนือ bifurcation)

3.Superior hypogastric plexus
(@ bifurcation)

4.Inferior hypogastric plexus

52. Structure A receives sympathetic fibers from which nerve

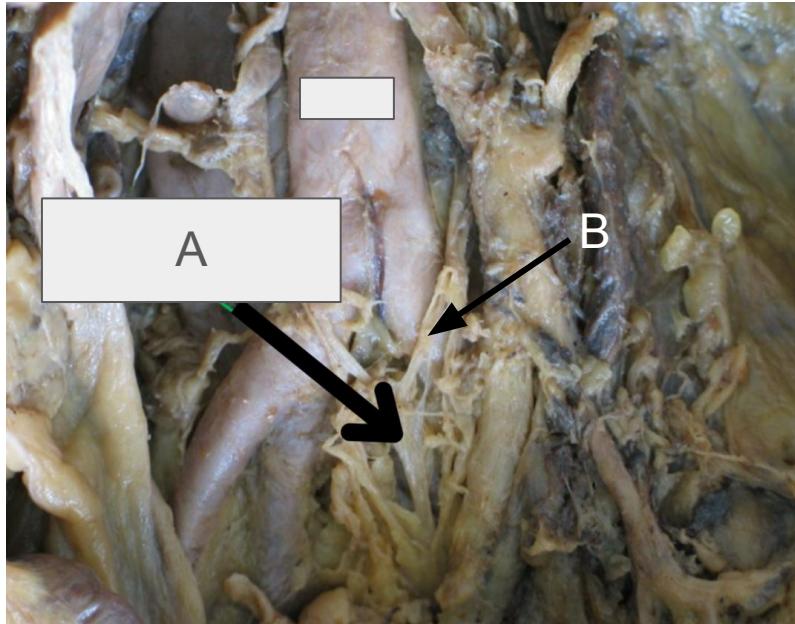
1.Greater splanchnic nerve

2.Lesser splanchnic nerve

3.Upper lumbar splanchnic nerve

4.Lower lumbar splanchnic nerve (Correct)

Station 27



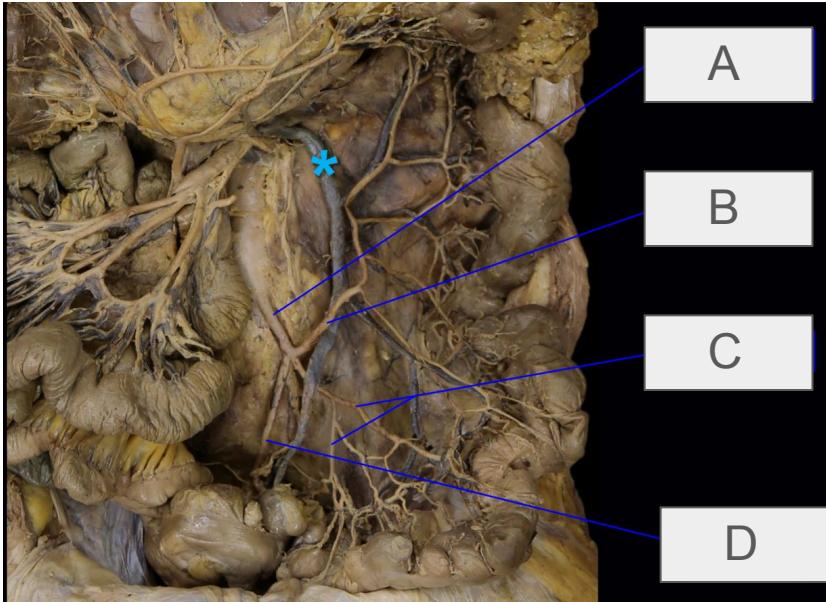
53. Identify structure B

- 1.Greater splanchnic nerve
- 2.Upper lumbar splanchnic nerve
- 3.Lower lumbar splanchnic nerve**
- 4.Hypogastric nerve

54. Structure A gives fibers to which nerve

- 1.Lesser splanchnic nerve
- 2.Upper lumbar splanchnic nerve
- 3.Lower lumbar splanchnic nerve
- 4.Hypogastric nerve**

Station 28



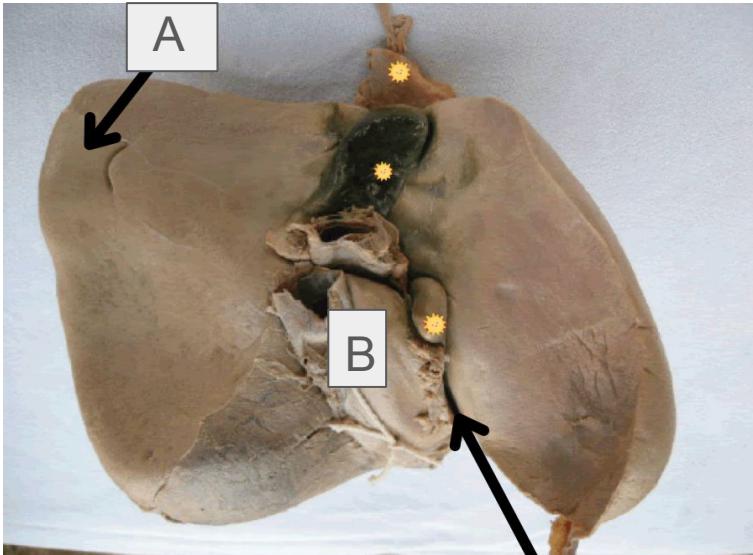
55. Identify sigmoidal artery **C**

56. Identify superior rectal artery **D**

A = IMA

B = L colic a.

Station 29



57. Identify segment A

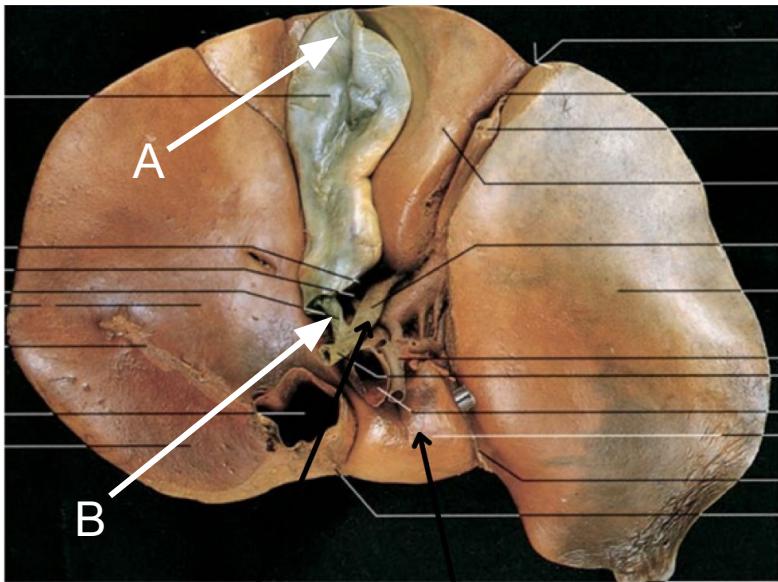
- a.III
- b.V
- c.VI
- d.VII

58. Identify segment B

- a.I
- b.IV
- c.II
- d.VIII

ใน specimen จริง ดูให้ดีว่ามันวางซ้ายขวาหน้าหลังอยู่ยังไง

Station 30



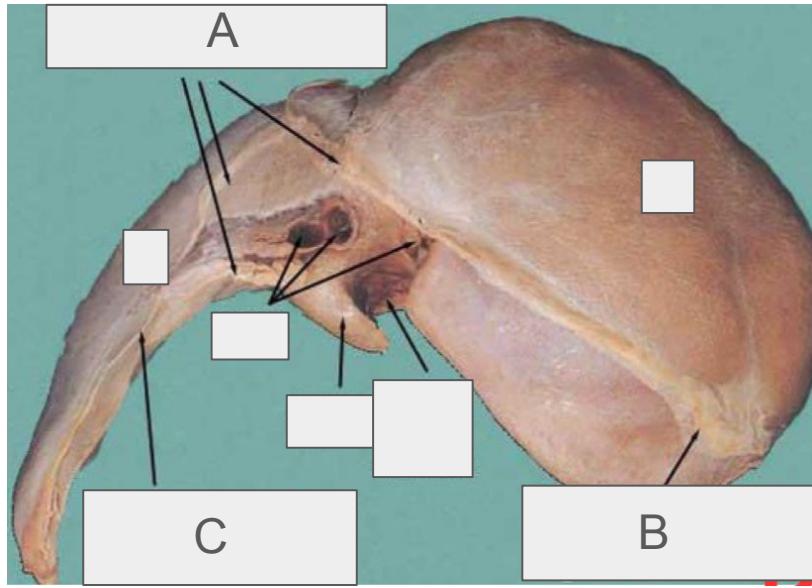
59. Identify structure A

- a.Fundus of gallbladder
- b.Body of gallbladder
- c.Neck of gallbladder
- d.Infundibulum of gallbladder

60. Identify structure B

- a.Hartmann's pouch
- b.Common hepatic duct
- c.Common bile duct
- d.Cystic duct

Station 31



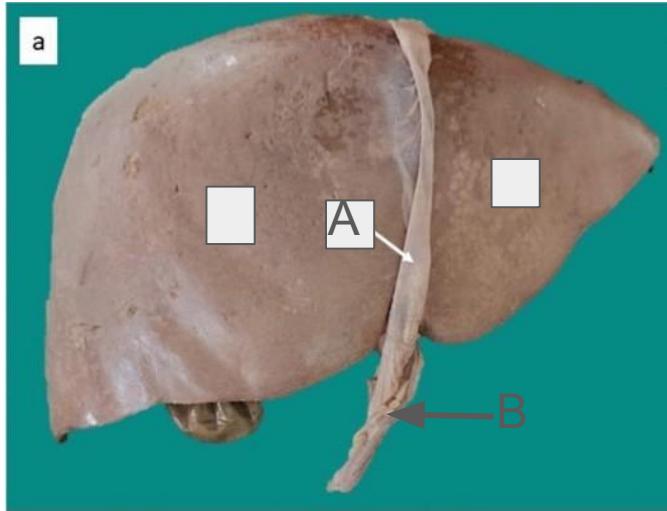
61. Identify structure A

- a. Left triangular ligament
- b. **Coronary ligament**
- c. Right triangular ligament
- d. Ligamentum venosum

62. Identify structure C

- a. **Left triangular ligament**
- b. Coronary ligament
- c. Right triangular ligament
- d. Ligamentum venosum

Station 32



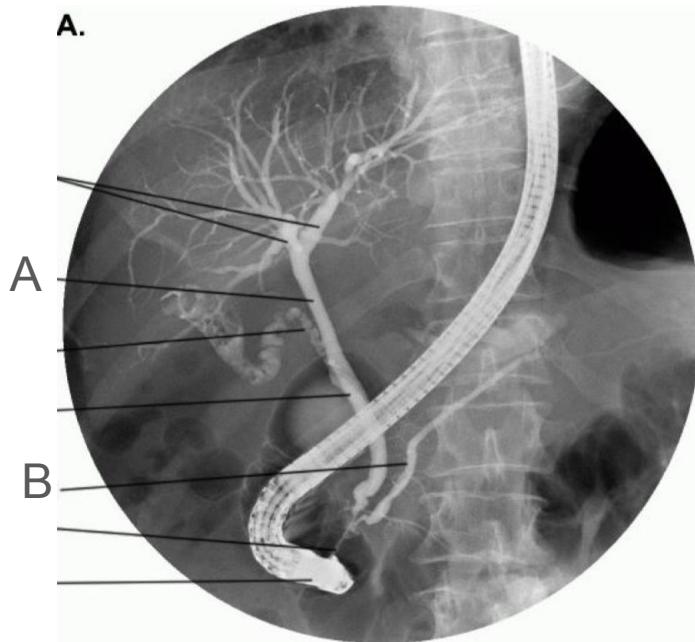
63. Which structure does A originate from?

- a. Ductus venosus
- b. Umbilical artery
- c. Umbilical vein
- d. Peritoneum

64. Which structure does B originate from?

- a. Ductus venosus
- b. Umbilical artery
- c. Umbilical vein
- d. Peritoneum

Station 33



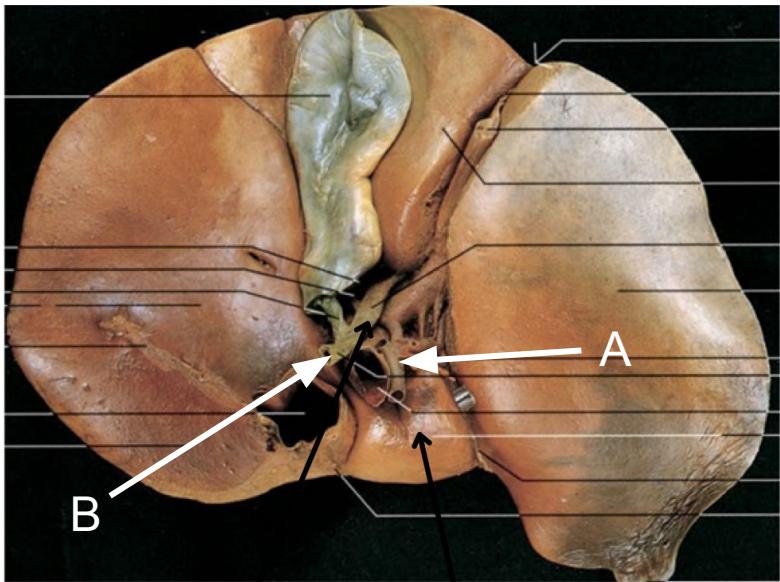
65. Identify structure A

1. Common hepatic duct
2. Cystic duct
3. Pancreatic duct
4. Common bile duct

66. Identify structure B

1. Common hepatic duct
2. Cystic duct
3. Pancreatic duct
4. Common bile duct

Station 34



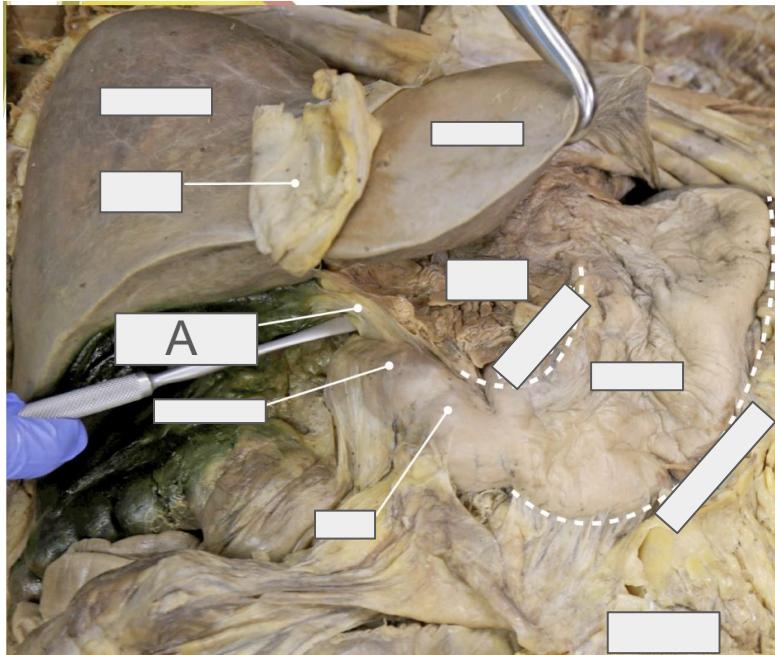
67. Identify structure A

1. Portal vein
2. **Hepatic artery**
3. Hepatic vein
4. Common hepatic artery

68. Identify structure B

1. Common hepatic duct
2. Cystic duct
3. Pancreatic duct
4. **Common bile duct**

Station 35



Portal triad = hepatic a., portal v., bile duct

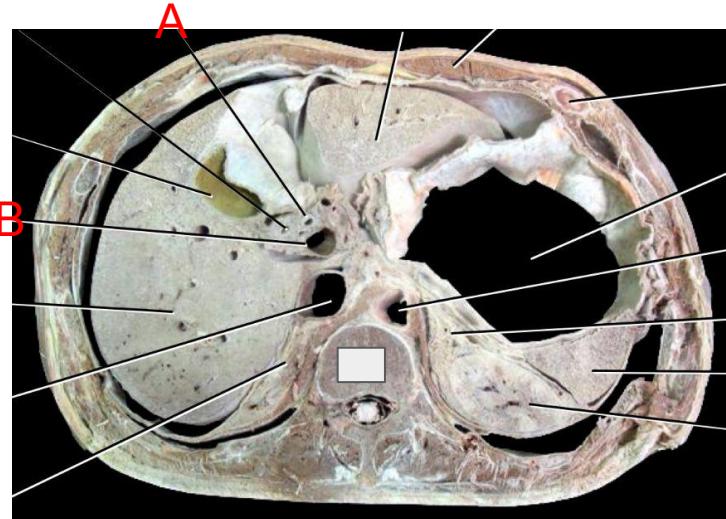
69. Identify structure A

- a. Hepatogastric ligament
- b. **Hepatoduodenal ligament**
- c. Ligamentum venosum
- d. Ligamentum teres hepatis

70. Structure A doesn't cover which structure

- 1. Hepatic vein
- 2. Hepatic artery
- 3. Bile duct
- 4. Portal vein

Station 36



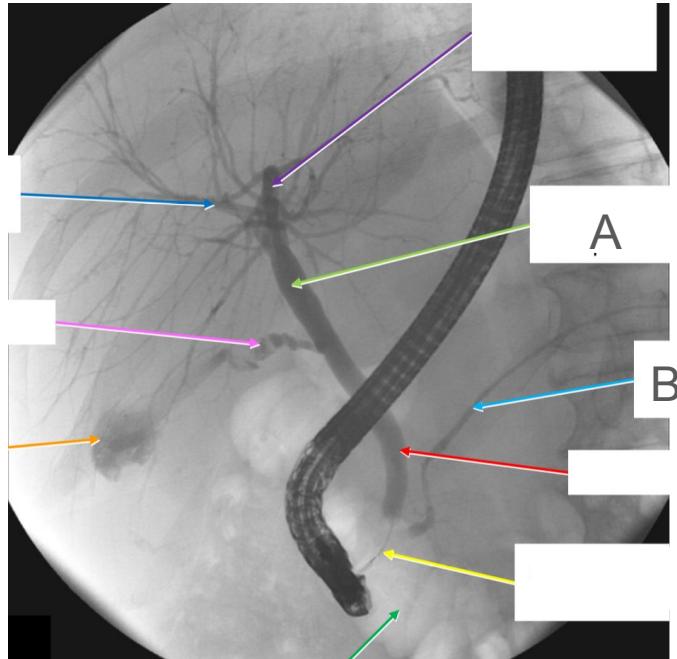
71. Identify structure A

- 1.Gallbladder
- 2.Hepatic artery
- 3.Bile duct
- 4.Portal vein
- 5.Inferior vena cava

72. Identify structure B

- 1.Gallbladder
- 2.Hepatic artery
- 3.Bile duct
- 4.Portal vein
- 5.Inferior vena cava

Station 37



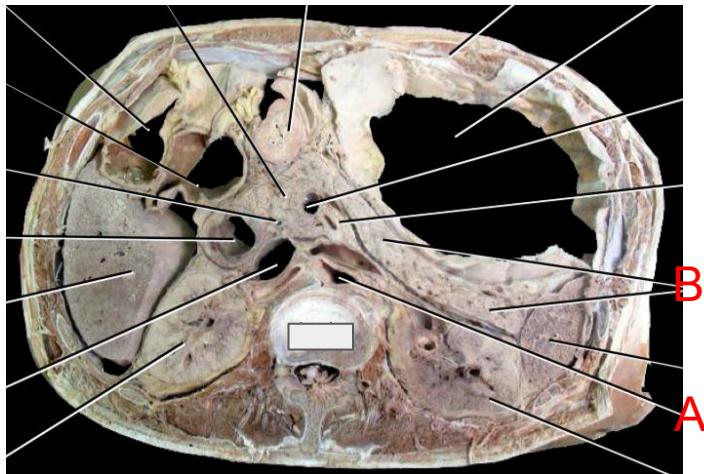
73. Identify structure A

- 1.Cystic duct
- 2.**Common hepatic duct**
- 3.Common bile duct
- 4.Main pancreatic duct
- 5.Right hepatic duct

74. Identify structure B

- 1.Cystic duct
- 2.Common hepatic duct
- 3.Common bile duct
- 4.**Main pancreatic duct**
- 5.Right hepatic duct

Station 38



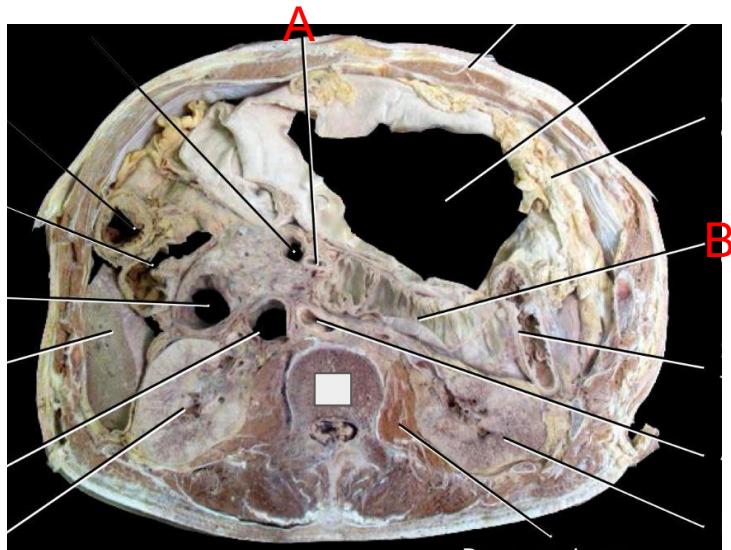
75. Identify structure A

- 1.Right lobe of liver
- 2.Pancreas
- 3.Right kidney
- 4.Left kidney
- 5.Spleen

76. Identify structure B

- 1.Right lobe of liver
- 2.Pancreas
- 3.Right kidney
- 4.Left kidney
- 5.Spleen

Station 39



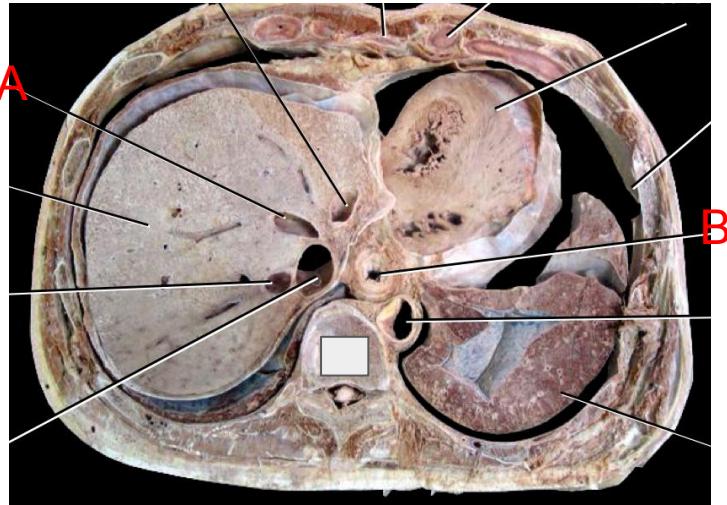
77. Identify structure A

- 1.Celiac trunk
- 2.Splenic artery
- 3.Hepatic artery
- 4.Inferior mesenteric artery
- 5.Superior mesenteric artery

78. Identify structure B

- 1.Jejunum
- 2.Pancreas
- 3.Transverse colon
- 4.2nd part of duodenum
- 5.3rd part of duodenum

Station 40



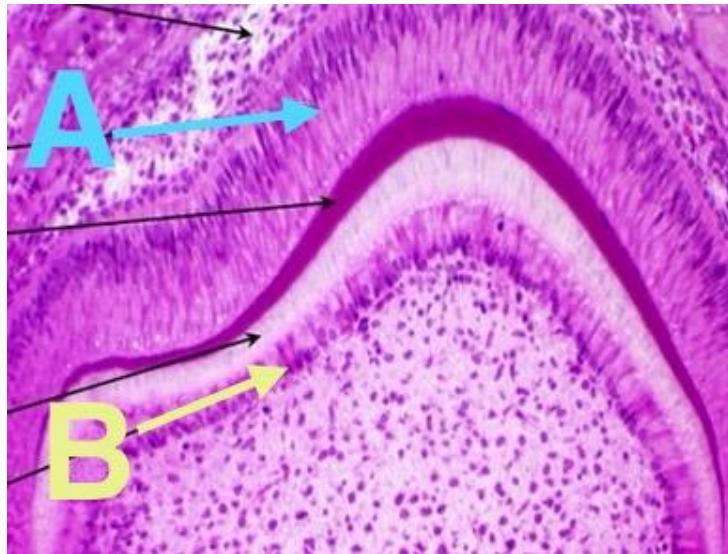
79. Identify structure A

- 1.Right hepatic vein
- 2.Middle hepatic vein
- 3.Bile duct
- 4.Hepatic artery
- 5.Groove of ligamentum venosum

80. Identify structure B

- 1.Inferior vena cava
- 2.Abdominal aorta
- 3.Esophagus
- 4.Duodenum
- 5.Portal vein

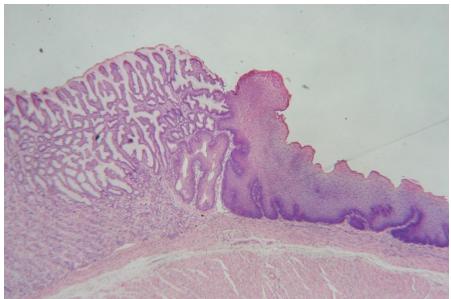
Station 41



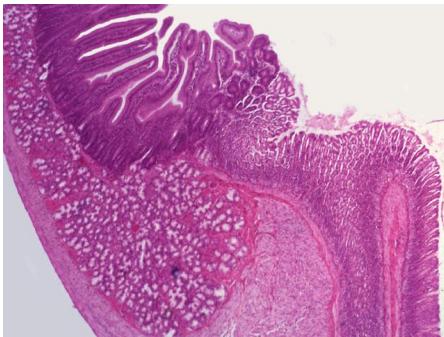
81. Identify structure A
- A. Ameloblast
 - B. Odontoblast
 - C. Dentin
 - D. Enamel
82. What cell does structure B differentiate from?
- A. Enamel
 - B. Dentin
 - C. Dental papilla
 - D. Stellate reticulum

Station 42

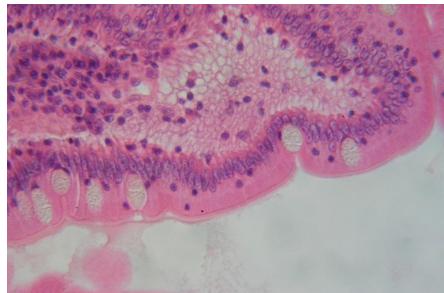
A.



B.



C.



D.

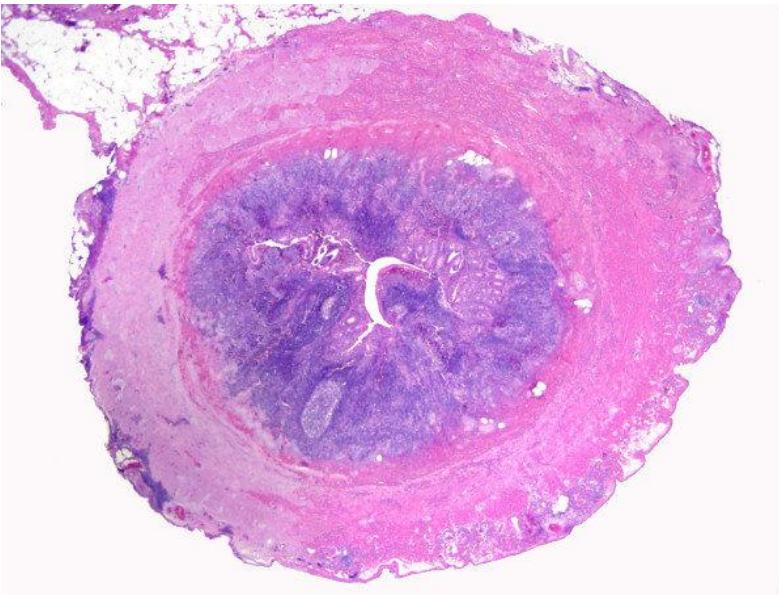
83. Identify picture C

- A. Esophagogastric junction
- B. Gastroduodenal junction
- C. Ileocecal junction
- D. Recto-anal junction**

84. Identify picture A

- A. Esophagogastric junction**
- B. Gastroduodenal junction
- C. Ileocecal junction
- D. Recto-anal junction

Station 43



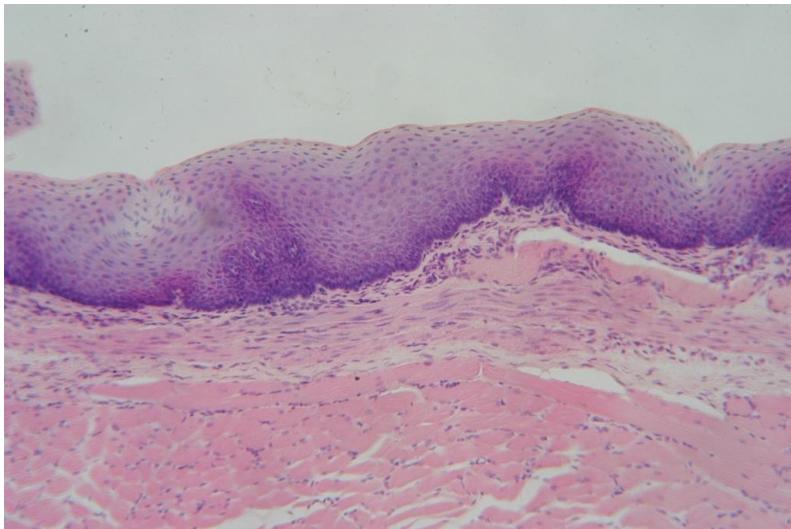
85. Identify this picture

- A. Ileum
- B. Jejunum
- C. Vermiform appendix
- D. Rectum

86. Which of the following is true regarding this picture?

- A. Contains taeniae coli in its muscularis externa for peristaltic segmentation.
- B. Exhibits villi projecting into the lumen to enhance nutrient absorption.
- C. Features abundant lymphoid follicles extending from the lamina propria into the submucosa.
- D. Houses Brunner's glands in the submucosa for alkaline mucus secretion.

Station 44



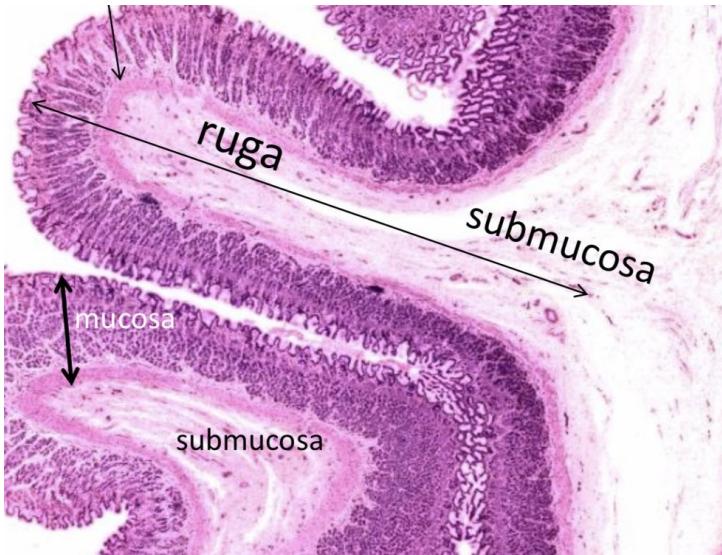
87. Identify this picture

- A. Lip
- B. Esophagus
- C. Tongue
- D. Pharynx

88. Which of the following is true regarding this picture?

- A. The mucosal epithelium is nonkeratinized stratified squamous epithelium that protects against mechanical abrasion.
- B. The submucosa contains cardiac glands that secrete acid-neutralizing mucus.
- C. The muscularis externa is composed entirely of smooth muscle throughout the entire length of the esophagus.
- D. The esophagus is covered externally by a serosa layer continuous with the peritoneum.

Station 45



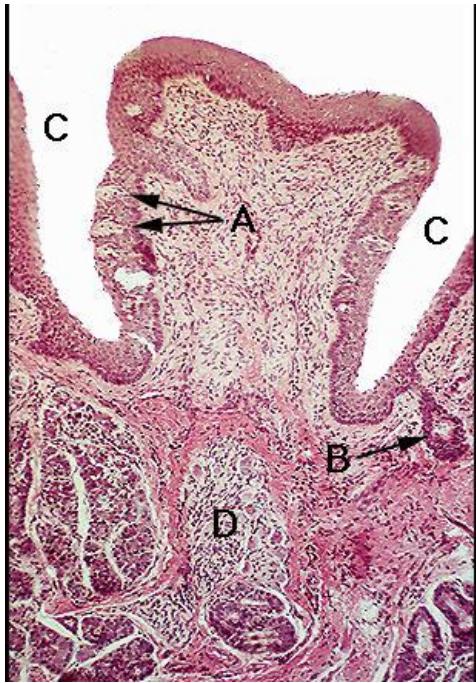
89. Identify this picture

- A. Cardia
- B. Pylorus
- C. Fundus-body
- D. Cardia-pylorus

90. Which of the following is true regarding this picture?

- A. The mucosa contains gastric pits that open into tubular glands rich in parietal and chief cells.
- B. The mucosal glands predominantly consist of mucous neck cells that secrete alkaline mucus to protect the epithelium.
- C. The muscularis externa consists of only two layers: inner circular and outer longitudinal muscle.
- D. The submucosa contains Peyer's patches that play a role in immune surveillance.

Station 46



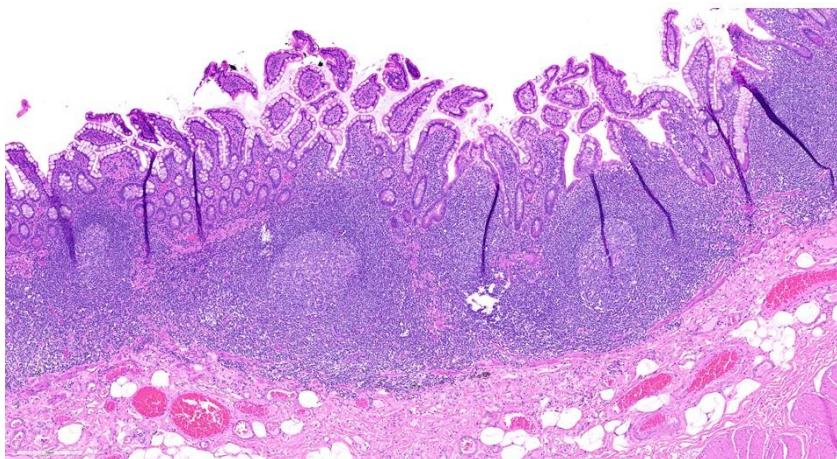
91. Identify this picture

- A. Foliate papillae
- B. Fungiform papillae
- C. Circumvallate papillae
- D. Filiform papillae

92. Which of the following is true?

- A. Filiform papillae are the most numerous, keratinized, and lack taste buds, providing mechanical sensation.
- B. Fungiform papillae are large, leaf-shaped structures located on the posterior tongue and contain no taste buds.
- C. Circumvallate papillae are small, conical projections scattered across the anterior two-thirds of the tongue and lack taste buds.
- D. Foliate papillae are abundant on the dorsal surface and primarily responsible for the tongue's rough texture.

Station 47



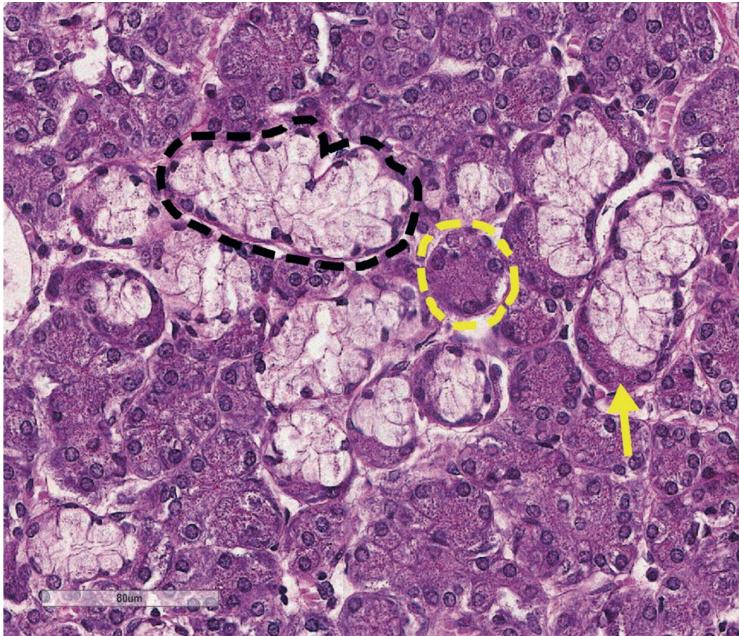
93. Which organ is this slide taken?

- A. Ileum
- B. Rectum
- C. Duodenum
- D. Anus

94. What is this structure?

- A. Peyer's patch
- B. Brunner's gland
- C. Von Ebner's gland
- D. Gastric gland

Station 48



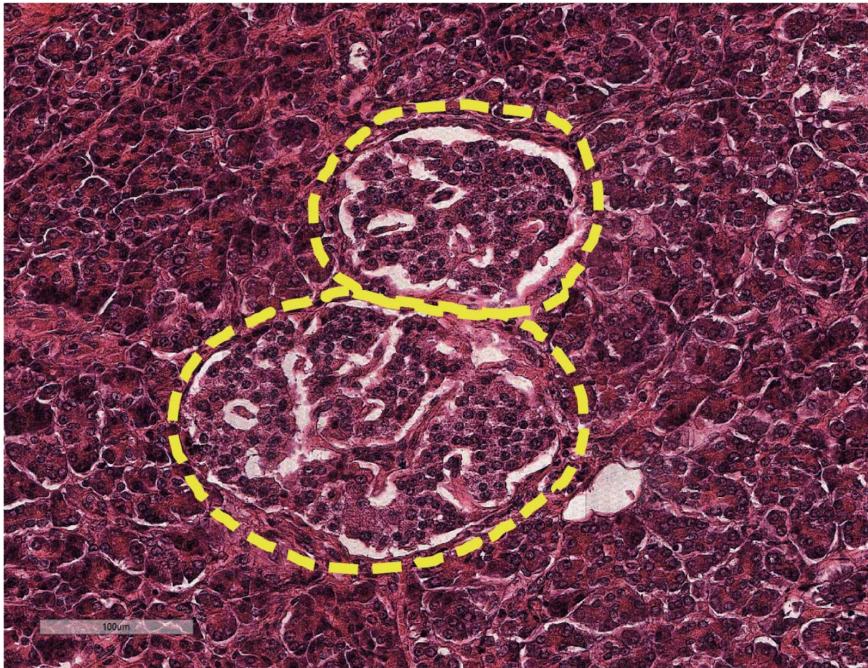
95. What is the name of this salivary gland?

- A. Submandibular gland
- B. Sublingual gland
- C. Parotid gland
- D. Parathyroid gland

96. Which of the following is the cell being pointed to?

- A. Serous cell
- B. Mucous cell
- C. Acinar cell
- D. Ductal cell

Station 49



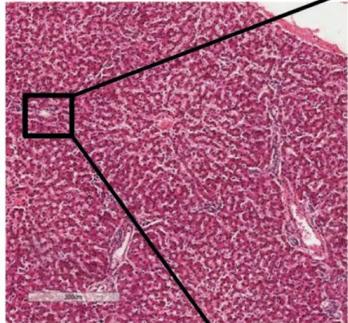
97. Identify this picture.

- A. Pancreas
- B. Liver
- C. Testis
- D. Parathyroid gland

98. Identify the structure being outlined.

- A. Islets of Langerhans
- B. Serous acini
- C. Acinar cell
- D. Hepatocyte

Station 50



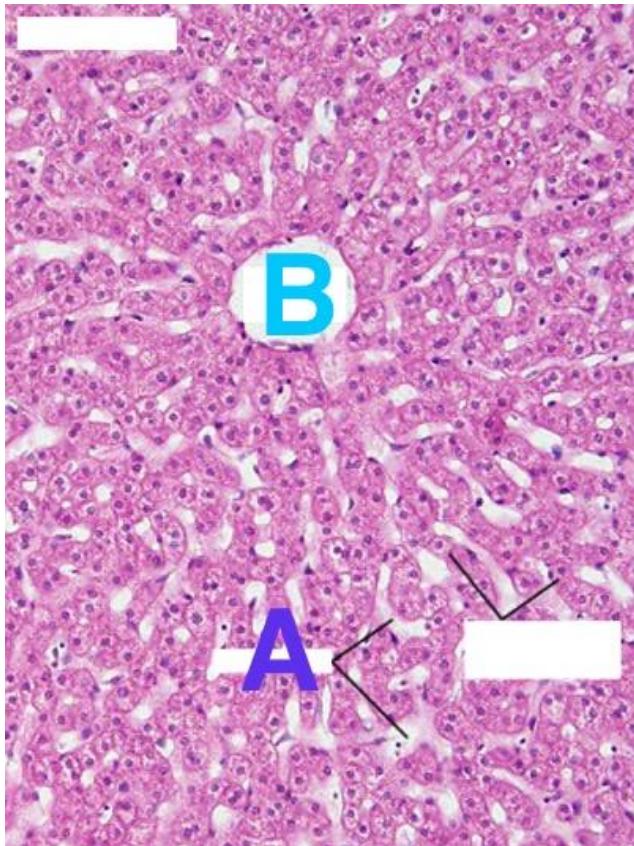
99. Identify structure Y.

- A. Bile duct
- B. **Portal vein**
- C. Hepatic artery
- D. Lymphatic vessel

100. Identify this picture.

- A. **Portal area**
- B. Portal triad
- C. Portal trigone
- D. Portal space

Station 51



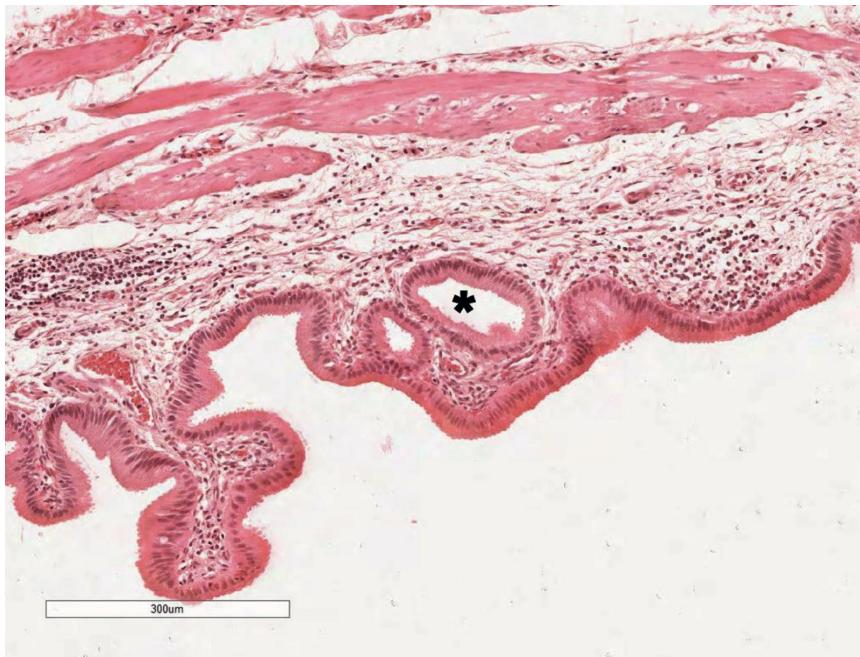
101. Identify structure B.

- A. Central vein
- B. Portal vein
- C. Hepatic artery
- D. Hepatic lobule

102. Identify structure A.

- A. Perisinusoidal space
- B. Central vein
- C. Sinusoidal space
- D. Space of Disse

Station 52



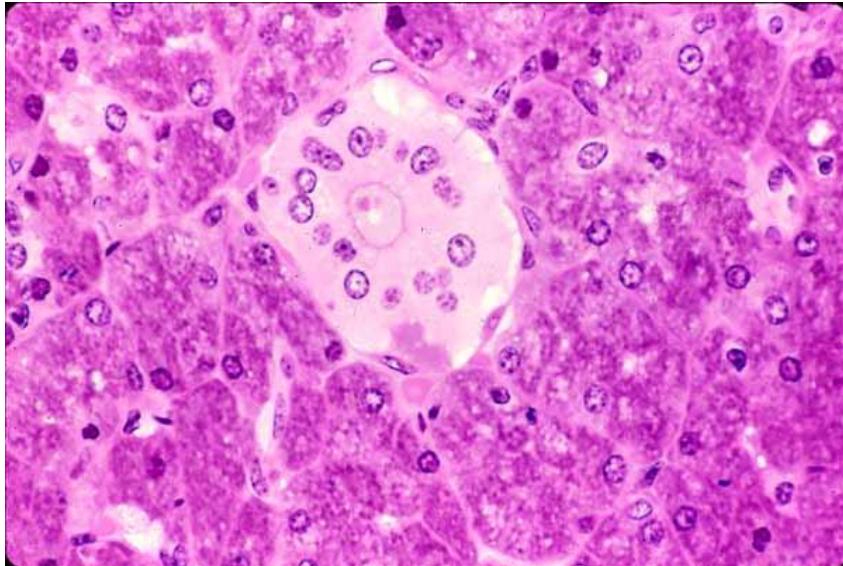
103. Identify this picture.

- A. Duodenum
- B. Jejunum
- C. Ileum
- D. Gallbladder

104. Which of the following can be found in this picture.

- A. Villi
- B. Goblet cell
- C. Lamina propria
- D. Muscularis mucosae

Station 53



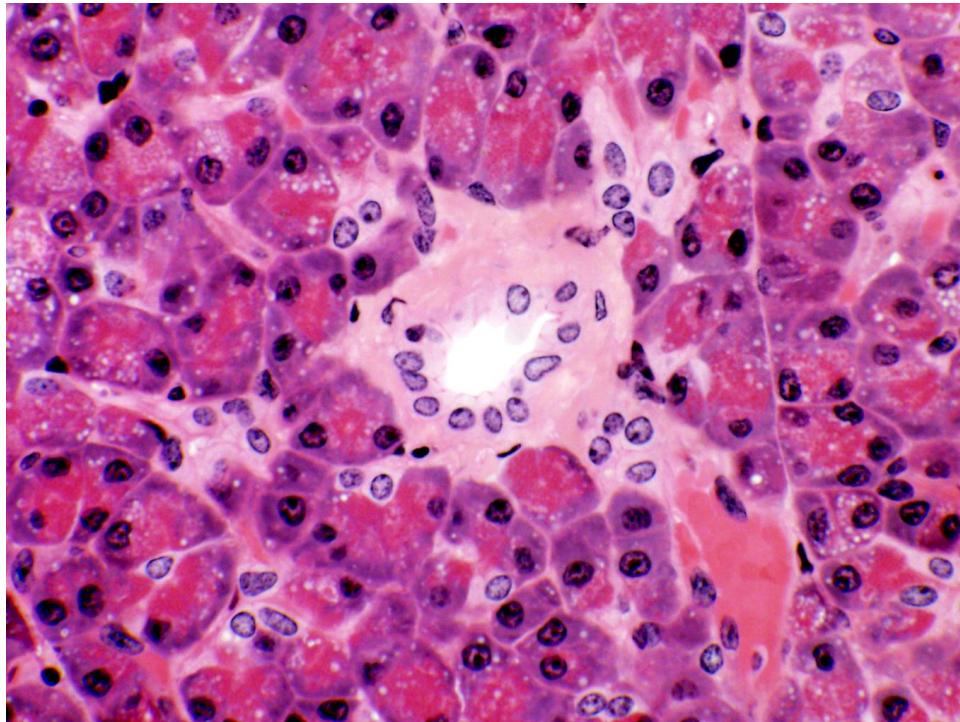
105. What is this structure called?

- A. Striated duct
- B. Intercalated duct
- C. Interlobular duct
- D. Interlobar duct

106. In which system is this structure typically found?

- A. Liver
- B. Pancreas
- C. Lymphatic vessel
- D. Salivary gland

Station 54



107. Identify this picture.

- A. Liver
- B. Exocrine pancreas
- C. Nephron
- D. Salivary gland

108. What can be found in this picture?

- A. Serous acinar cell
- B. Pancreatic acinar cell
- C. Lymphatic vessel
- D. Striated duct