



GI SYSTEM

PAST PAPERS

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- 1) Which of the following colonic polyps show dysplasia on microscopic examination and are considered a precursor of colonic adenocarcinoma?
- A. Inflammatory polyp
 - B. Hyperplastic polyp
 - C. Juvenile polyps.
 - D. Peutz-Jeghers polyps
 - E. Colonic adenoma

Answer: E

- 2) The most common tumor of the appendix:
- A. Appendiceal adenocarcinoma
 - B. Tubular adenoma
 - C. Carcinoid tumor
 - D. Signet ring carcinoma
 - E. Lymphoma.

Answer: C

- 3) Presence of which of the following risk factors is strongly associated with the development of gastric adenocarcinoma, Intestinal type:
- A. Inherited APC gene mutation
 - B. Vitamin B12 deficiency
 - C. Helicobacter Pylori Infection
 - D. Chronic alcohol abuse
 - E. Use of non-steroidal anti-Inflammatory drugs

Answer: C

- 4) Intestinal infection with which of the following organisms should not be treated with antibiotics?
- A. Shigella sonnei
 - B. Vibrio cholera
 - C. Escherichia coli O157:H7
 - D. Salmonella typhi.
 - E. Clostridium difficile

Answer: C

- 5) In physiological herniation, the intestinal loop of midgut returns to the abdominal cavity from the umbilical cord during the:
- A. 4th week of development.
 - B. 5th Week of development.
 - C. 6th week of development
 - D. 8th week of development
 - E. 10th week of development

Answer: E

- 6) on examination of the middle ear by doctor there is severe infection damaging the tympanic nerve, which is the secretomotor to the parotid gland, the tympanic nerve is:
- A. Forms tympanic plexus in the external auditory meatus.
 - B. Synapses with fibers in the lesser petrosal nerve.
 - C. Branch of Glossopharyngeal nerve.
 - D. Branch of Facial nerve.
 - E. Contains postganglionic parasympathetic fibers.

Answer: C

- 7) The portal vein, all the following statements are correct EXCEPT:
- A. It ends in porta hepatis of the liver.
 - B. It passes behind the third part of duodenum.
 - C. It receives the venous blood of duodenum.
 - D. It lies on the free edge of lesser omentum.
 - E. It is formed behind the neck of the pancreas.

Answer: B

- 8) Space of Disse: all of the following statements are correct EXCEPT:
- A. It contains Ito cells.
 - B. It contains Kupffer cells.
 - C. It houses the microvilli of hepatocytes.
 - D. Supported by reticular fibers.
 - E. It intervenes between hepatocytes and sinusoidal lining cells.

Answer: B

- 9) One of the followings concerning the absorption lipid-soluble vitamins is TRUE:
- A. it is decreased by conditions that induce steatorrhea.
 - B. It is taking place by active transport mechanisms.
 - C. it is increased by release of intrinsic factor.
 - D. It depends on the activity of enterokinase.
 - E. Is well correlated with bilirubin content in chyme.

Answer: A

- 10) Which of the following strongly favors Crohn disease over ulcerative colitis:
- A. Absence of skip lesions.
 - B. inflammation limited to the colon.
 - C. Inflammation limited to mucosa and submucosa.
 - D. Development of colonic tubular adenomas.
 - E. Presence of granulomas.

Answer: E

- 11) Which of the following drugs increase lower esophageal sphincter pressure, enhance gastric emptying and has no effect on small intestine or colonic motility:
- A. Alosetron.
 - B. Metoclopramide.
 - C. Misoprostol.
 - D. Omeprazole.
 - E. Octreotide.

Answer: B

- 12) What is the identity of the organism on S-S agar with forming Black spots (H₂S production) of the colonies?
- A. Staphylococcus Spp.
 - B. E.coli.
 - C. Shigella.
 - D. Streptococcus pyogenes.
 - E. Salmonella.

Answer: E

- 13) Which of the following indicates carrier status of HBV?
- A. HBcAg and IgG anti HBc
 - B. HBcAg and IgM anti HBc
 - C. HBeAg after 3 months
 - D. HBeAg and absence of HBV DNA
 - E. HBsAg and HBS antibody.

Answer: E

- 14) Which one of the following statements regarding metronidazole is NOT correct:
- A. It may produce disulfiram-like reaction.
 - B. It kills both the trophozoites and the cyst of E.histolytica.
 - C. Nausea is common side effect.
 - D. It is the drug of choice for extraluminal amebiasis.
 - E. It is the drug of choice for giardiasis.

Answer: B

- 15) One of the following is TRUE regarding pancreatic proteolytic enzymes:
- A. Have optimal activity at low PH.
 - B. Are activating brush border enzymes.
 - C. All of them act as endopeptidases.
 - D. Are responsible for final digestion of proteins.
 - E. Are secreted as inactive enzymes from the pancreas.

Answer: E

- 16) surgical removal of adenoid from nasopharynx causes numbness which of the following nerves mostly affected:
- A. Glossopharyngeal nerve.
 - B. External laryngeal nerve.
 - C. Superior cervical ganglion.
 - D. Vagus nerve.
 - E. Maxillary nerve.

Answer: E

- 17) The purgative that causes rapid bowel evacuation within 1-3 h, after oral Intake, is:
- A. Magnesium citrate.
 - B. Docusate
 - C. Bisacodyl.
 - D. Senna.
 - E. Liquid paraffin.

Answer: A

- 18) Regarding the gastrointestinal motility experiment that we performed in our physiology lab, all the following sentences are true EXCEPT:
- A. The organ bath contained a warm and oxygenated buffer.
 - B. Pieces of the small intestine were connected through a transducer to special software.
 - C. Pieces of the small Intestine (sl) of the rat were used.
 - D. The tissue was stimulated by an electric stimulator.
 - E. The software is capable of displaying a simple graph of tension against time.

Answer: D

- 19) Liver cell adenoma is classically related to the exposure of one of the following:
- A. Oral contraceptives.
 - B. Halothane.
 - C. Tetracycline.
 - D. Antineoplastic agents.
 - E. Carbon tetrachloride.

Answer: A

- 20) Which of the following is characteristic for patients with familial adenomatous polyposis (FAP) syndrome:
- A. Autosomal recessive pattern of Inheritance.
 - B. Microsatellite instability Is the hallmark of disease.
 - C. 100% of patients develop colorectal adenocarcinoma by age of 30 if untreated.
 - D. Inherited mutations in TP53 gene.
 - E. The most common polyps are hyperplastic polyps.

Answer: C

- 21) One of the following regarding cholecystokinin is NOT True:
- A. Causes contraction of the gallbladder.
 - B. Reduces the muscle tone of Oddi sphincter.
 - C. Activates parasympathetic control of the pancreas.
 - D. Stimulates pancreatic duct cells.
 - E. Its release is stimulated by high fat content in meal.

Answer: D

- 22) The drug that significantly decrease both basal and meal-stimulated acid secretion is:
- A. Ranitidine.
 - B. omeprazole.
 - C. Bismuth subsalicylate.
 - D. Misoprostol.
 - E. Sucralfate.

Answer: B

- 23) The second most common site of copper accumulation in Wilson disease is:
- A. Brain.
 - B. Skin.
 - C. Heart.
 - D. Kidney.
 - E. Lungs.

Answer: A

- 24) an old man has carcinoma of the rectum, the cancer is metastasized via the vein into which of the following structures?
- A. Spleen.
 - B. Suprarenal gland.
 - C. Duodenum.
 - D. Kidney.
 - E. Liver.

Answer: E

- 25) The intestinal Villi contain all the followings EXCEPT:
- A. Smooth muscle.
 - B. Striated borders.
 - C. Paneth cells.
 - D. Lacteals.
 - E. Simple columnar epithelium and goblet cells.

Answer: C

26) One of the followings regarding the blood flow to the gastrointestinal tract is NOT TRUE:

- A. Increased blood flow results in increasing water and electrolyte secretion.
- B. Autonomic nervous system of the GI is controlling the blood flow.
- C. After meals, there is an increase in blood flow.
- D. is controlled by interstitial cells of Cajal.
- E. Enteric nervous system is involved in controlling blood flow.

Answer: D

27) On examination of patient, you note loss of taste and sensation to the anterior 2/3 of one side of the tongue, and loss of secretion of the submandibular and Sublingual glands, muscles of mastication are normal. Your diagnosis is:

- A. Lesion of mandibular nerve at foramen ovale.
- B. Lesion of lingual nerve at its origin.
- C. Lesion of lingual nerve and facial nerves.
- D. Lesion of facial nerve.
- E. Lesion of trigeminal and facial nerves.

Answer: B

28) For selective isolation of which specific intestinal pathogen is Skirrow's media recommended?

- A. Vibrio cholera.
- B. Salmonella Spp.
- C. Entamoeba histolytica.
- D. Shigella Spp.
- E. Campylobacter.

Answer: E

29) Which of the following is the most associated with hepatocellular carcinoma?

- A. Chronic Hepatitis C
- B. Acute Hepatitis C
- C. Acute Hepatitis A
- D. Chronic Hepatitis B +D
- E. Chronic Hepatitis B

Answer: E

30) The transverse mesocolon characterized by all of the followings EXCEPT:

- A. Contains parasympathetic fibers from vagus and sacral spinal nerves.
- B. Contains lymph nodes drains into preaortic lymph nodes.
- C. Attached to the Inferior border of pancreas.
- D. Envelope the transverse colon.
- E. Contains branches from superior and inferior mesenteric arteries.

Answer: C

- 31) Which of the following preganglionic sympathetic fibers synapse in the Inferior mesenteric ganglia:
- A. S2 S3 S4 spinal nerves.
 - B. Greater splanchnic nerves.
 - C. Lumbar splanchnic nerves.
 - D. Lesser splanchnic nerves.
 - E. Lowest splanchnic nerves.

Answer: C

- 32) A 32-year-old man undergoes vasectomy as a means of permanent birth control. A physician performing the vasectomy by making an incision on each side of the scrotum should remember which of the following statements most applicable to the scrotum?
- A. It is innervated by ilioinguinal and genitofemoral nerves.
 - B. Its dartos tunic is continuous with the perineal membrane.
 - C. The venous blood drains primarily into the renal vein on the left.
 - D. Its lymphatic drainage is primarily into lumbar (aortic) nodes.
 - E. It receives blood primarily from the testicular artery.

Answer: A

- 33) A 3-year-old female Gravida 3, Para 2 at 32 weeks of gestation, presents to the emergency department with complaints of severe abdominal pain, fatigue, and nausea. Physical examination is significant for profound jaundice and tenderness to palpation of the right upper quadrant of the abdomen. The patient returned 2 weeks ago from a 1 month-long trip to India. She received sporadic pre-natal care while traveling and reports no known complications in her current pregnancy to date. She denies any past medical problems and states that her prior pregnancy proceeded as a normal vaginal birth without any complications. Infection with which of the following organisms would predispose the worst prognosis with the highest mortality rate for this patient?
- A. Hepatitis C.
 - B. Hepatitis A.
 - C. Hepatitis B.
 - D. Hepatitis D.
 - E. Hepatitis E.

Answer: E

- 34) In healthy person the increase of feeding behaviors is well correlated with the increase in:
- A. Activity of thermoregulatory centers in hypothalamus.
 - B. GIP (Glucose dependent Insulinotropic Polypeptide) release.
 - C. Cholecystinin (CCK) release.
 - D. Leptin level in blood.
 - E. Expression of OB gene.

Answer: A

35) High serum level of antimitochondrial antibodies is characteristic of which of the following:

- A. Primary biliary cirrhosis.
- B. Primary sclerosing cholangitis.
- C. Autoimmune hepatitis.
- D. Viral hepatitis.
- E. Alpha-1-antitrypsin deficiency.

Answer: A

36) Heat-stable toxin of ETEC acts by which of the following mechanisms?

- A. Activates adenylyl cyclase.
- B. Ribosomal dysfunction.
- C. Activates guanylyl cyclase.
- D. Attachment and effacement.
- E. Aggregative adherence.

Answer: C

37) Giardia lamblia, which is wrong?

- A. Diagnosis is by antigen testing on stool sample.
- B. Variant specific proteins help the parasite to escape the immune system.
- C. The trophozoites can live for a long time outside the body.
- D. Infective stage is the cyst.
- E. Causes fatty diarrhea.

Answer: C

38) Concerning the histology of the glands of the digestive system, all the followings are correct EXCEPT:

- A. The parotid gland has acini capped by serous demilunes and delivers the secretions into intercalated ducts.
- B. The pancreatic acini are serous glands containing centroacinar cells and their cells are characterized by polarity.
- C. The submandibular gland is a compound tubuloalveolar gland; it has a complicated duct system.
- D. The Von Ebner glands deliver their serous secretion into the groove of the circumvallate papillae.
- E. The Brunner glands in the submucosa of the duodenum secretes mucus and urogastrone.

Answer: A

- 39) Cancer in the deep part of the submandibular gland will involve or compress all the following structures EXCEPT:
- A. Internal carotid artery.
 - B. Facial artery.
 - C. Lingual nerve.
 - D. Mylohyoid muscle.
 - E. Hypoglossal nerve.

Answer: A

- 40) *Ascaris lumbricoides*, one is wrong;
- A. Eggs are ingested and hatch in the ileum.
 - B. Humid environment is needed for infectivity.
 - C. Ova is typically stained brown from bile.
 - D. Non-segmented.
 - E. Eggs become infective 2 to 6 weeks following deposition.

Answer: A

- 41) An outbreak of watery diarrhea occurring in a center housing young children awaiting foster care is investigated by the health department. The stool is positive for fecal leukocytes but is not heme-positive. The etiologic agent is isolated on MacConkey agar. Which of the following is the most likely etiologic agent?
- A. *Salmonella typhi*.
 - B. Enteroinvasive *E. coli*.
 - C. *Shigella flexneri*.
 - D. *Escherichia coli* O157:H7.
 - E. *Bacillus cereus*.

Answer: B

- 42) All the followings may describe the contractions that appear along the small intestine EXCEPT:
- A. Both segmentation and peristaltic contractions propel chyme in anal-ward direction.
 - B. Contractions are increased by increasing sympathetic tone.
 - C. Tonic contractions are set by release of neurotransmitters.
 - D. Increased velocity of chyme propulsion leads to a decreased intestinal absorption.
 - E. The rhythm of segmentation contractions is set by the basic electrical rhythm of that segment.

Answer: B

- 43) All the following statement concerning the indirect inguinal hernia are Correct EXCEPT:
- A. Injury to the ilioinguinal nerve may cause the hernia.
 - B. It is usually unilateral in adults.
 - C. The hernial sac passes through the superficial inguinal ring.
 - D. Common in young age.
 - E. It lies lateral to inferior epigastric vessels.

Answer: A

- 44) All of the following are true about the allantois, EXCEPT:
- A. It is endodermal in origin.
 - B. It is an extension of hindgut.
 - C. The uro-rectal septum passes posterior to it during development.
 - D. It gives rise to the urinary bladder.
 - E. It gives rise to the upper part of the anal canal.

Answer: E

- 45) All are true regarding hepatitis B virus (HBV), infection EXCEPT:
- A. It is a blood borne pathogen.
 - B. HBV vaccine AND HBV immunoglobulin should be given to infants born to mothers carriers of HBV infection.
 - C. HBV vaccine is given to all health care workers.
 - D. It causes only chronic form of hepatitis.
 - E. Can be transmitted through a vertical way from mother to infant.

Answer: D

- 46) A liver biopsy showed abundant Mallory hyaline bodies and extensive macrovesicular steatosis. Which of the following is the most likely underlying condition?
- A. Sclerosing cholangitis.
 - B. Chronic alcoholism.
 - C. Acetaminophen toxicity.
 - D. Budd-Chiari syndrome.
 - E. Hemochromatosis.

Answer: B

- 47) A general surgeon is giving a lecture to a team of surgery residents. She describes characteristics of structures superior to the pectinate line of the anal canal, including:
- A. Stratified squamous epithelium.
 - B. External hemorrhoids.
 - C. Lymphatic drainage into the superficial inguinal nodes
 - D. Venous drainage into the caval system.
 - E. Visceral sensory innervation.

Answer: E

48) A chimeric immunoglobulin that binds to and neutralizes TNF- α , is:

- A. Natalizumab.
- B. Infliximab.
- C. Certolizumab.
- D. Adalimumab.
- E. Terlipressin.

Answer: B

49) A baby girl at birth has meconium in her vagina and no anal opening. What type of birth defect does she have?

- A. Recto urethral fistula.
- B. Recto vaginal fistula.
- C. Uro rectal fistula.
- D. Recto perineal fistula.
- E. Congenital megacolon.

Answer: B

50) A 65-year-old chronic alcoholic man presented with weight loss and hepatomegaly; his liver function test revealed elevated liver enzymes. What is his lifetime probability of developing liver cirrhosis?

- A. 5-10%.
- B. 50-70%.
- C. 30-40%.
- D. 20-25%.
- E. 10-15%.

Answer: E

51) A 60-year-old man complaining of dysphagia for the last 6 months, upon upper gastrointestinal endoscopy a mass in the middle portion of esophagus was identified. Biopsy showed carcinoma. The most likely cause for the development of this carcinoma is:

- A. Chronic alcohol abuse.
- B. Gastroesophageal reflux disease.
- C. Helicobacter pylori infection.
- D. Low fiber diet.
- E. Mallory Weiss esophageal tear.

Answer: A

- 52) A 52-year-old woman presented with indigestion and heartburn occurring shortly after meals which she treated with over-the-counter antacids. Physical examination revealed mild epigastric tenderness. A radiolabeled-urea breath test is positive. What is the most probable etiologic agent?
- A. *Campylobacter jejuni*.
 - B. *Helicobacter pylori*.
 - C. *Yersinia enterocolitica*.
 - D. *Shigella dysenteriae*.
 - E. *Clostridium difficile*.

Answer: B

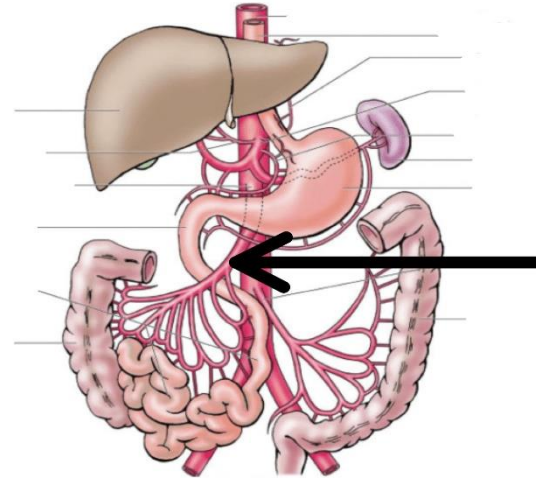
- 53) A 49-year-old woman has a large mass on the posterior abdominal wall at pelvic brim. Which of the following structures is most likely compressed by this mass when crossing the pelvic brim?
- A. Uterus.
 - B. Rectum.
 - C. Uterine artery.
 - D. Lumbosacral trunk.
 - E. Femoral artery.

Answer: D?

Practical

54) Ligation of the pointed artery at the pointed site It causes ischemia to one of the following organs:

- A. Stomach.
- B. Duodenum.
- C. Ascending colon.
- D. Pancreas.
- E. Descending colon.



Answer: C

55) This is section from the esophagus from a 60-year-old patient with liver cirrhosis who developed massive hematemesis what is the most likely cause of this bleeding based on the picture:

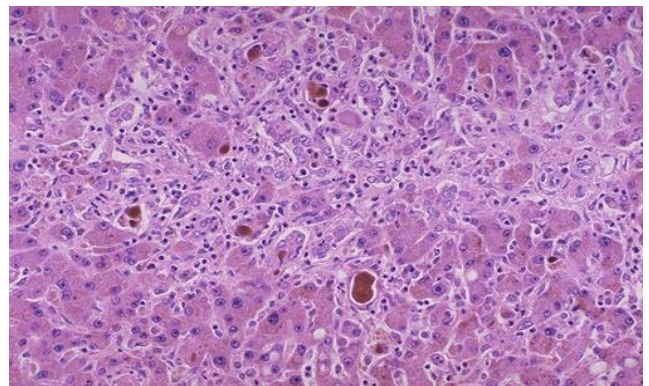
- A. Esophageal varices.
- B. Esophagitis.
- C. Esophageal cancer.
- D. Gastric ulcer.
- E. Gastric cancer.



Answer: A

56) The intra canalicular and intracellular accumulation of this brown pigment in Liver represents:

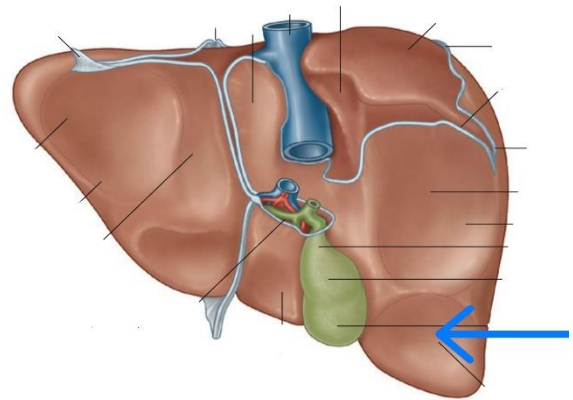
- A. Hemochromatosis.
- B. Steatosis.
- C. Wilson disease.
- D. Cholestasis.
- E. Drug toxicity.



Answer: D

57) identify the pointed Impression:

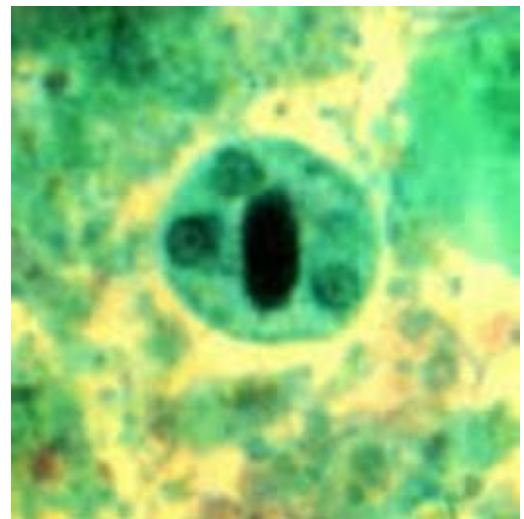
- A. Right colic flexure.
- B. Duodenum.
- C. Stomach.
- D. Renal.
- E. Esophagus.



Answer: A

58) Patient presents with a history of recurrent episodes of diarrhea alternates With constipation and the microscopic examination of stool sample showing as the picture. Which of the following is the cause?

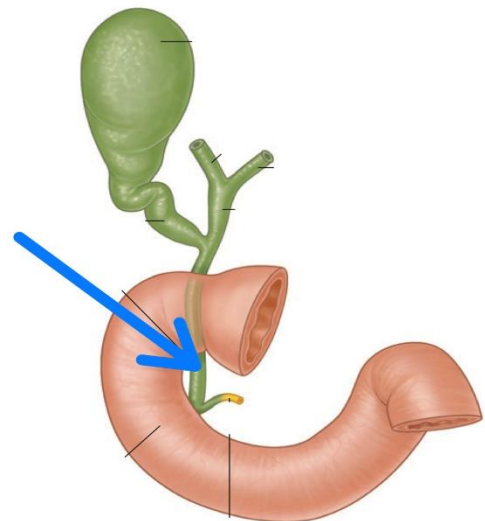
- A. Entamoeba histolytica
- B. Yersinia enterocolitica
- C. Giardia lamblia
- D. Clostridium difficile
- E. Enterotoxigenic Escherichia coli



Answer: A

59) The length of the pointed structure is :

- A. 6- 7cm
- B. 8- 10cm
- C. 2-3 cm
- D. 4- 5.cm
- E. 11- 12cm



Answer: B

60) Identify the pointed structure in this section:

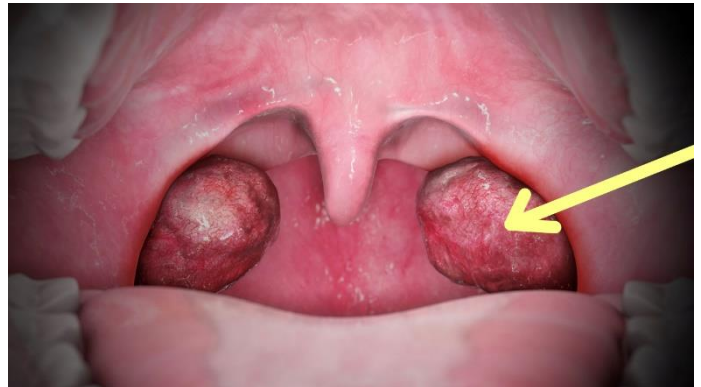
- A. Branch from portal vein.
- B. Bile duct.
- C. Central vein.
- D. Branch from hepatic artery.
- E. Blood sinusoids.



Answer: C

61) The nerve supply of the pointed structure is :

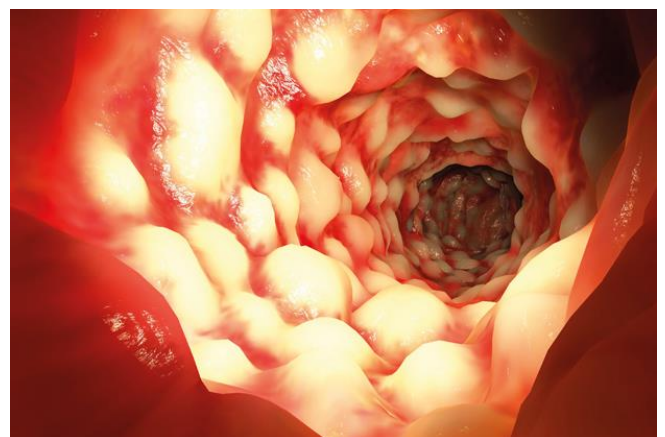
- A. Lesser palatine.
- B. Greater palatine.
- C. Autonomic.
- D. Short sphenopalatine.
- E. Long sphenopalatine.



Answer: A

62) A 20-year-old male with bloody chronic diarrhea and abdominal pain, his colon showed this cobblestone appearance on colonoscopy, this feature is most suggestive for:

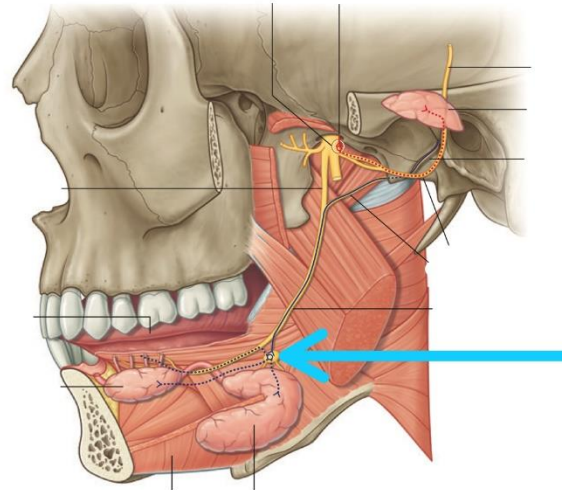
- A. Colonic polyps.
- B. Diverticulosis.
- C. Ulcerative colitis.
- D. Crohn disease.
- E. colon cancer.



Answer: D

63) Identify the pointed structure:

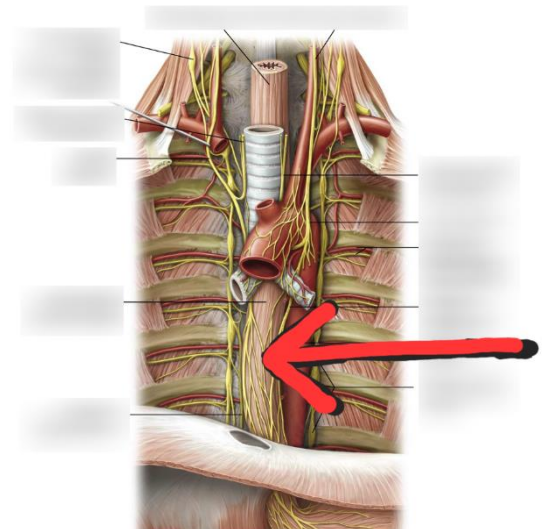
- A. Otic ganglia.
- B. Submandibular ganglia.
- C. Pterygopalatine ganglion.
- D. Sublingual ganglia.
- E. Ciliary ganglion.



Answer: B

64) The pointed structure characterized by the following EXCEPT:

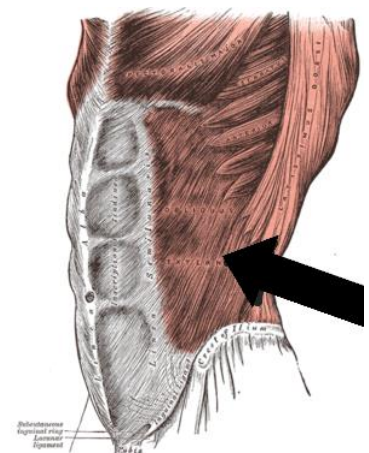
- A. Pierces the diaphragm at the level of 10th thoracic vertebrae.
- B. The length is 25 cm.
- C. Begins at the lower border of thyroid cartilage
- D. Crossed by the left main bronchus.
- E. Related to the arch of aorta on the left side



Answer: C

65) The aponeurosis of the pointed structure forming all the following EXCEPT:

- A. Conjoint tendon.
- B. Superficial Inguinal ring.
- C. inguinal ligament.
- D. Peritoneal ligament.
- E. Lacunar ligament.

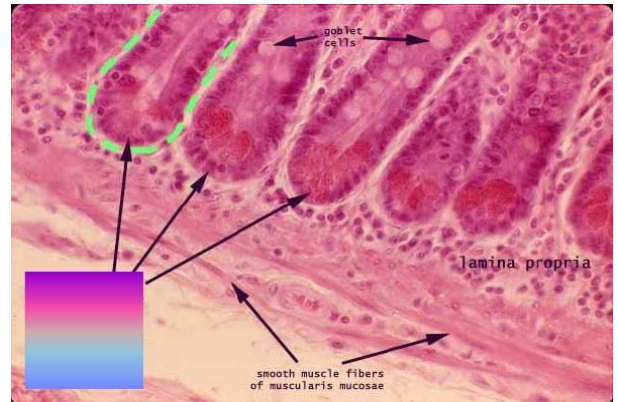


Answer: A

66) Identify the pointed structures in this section:

- A. Intestinal gland
- B. Brunner's gland
- C. Gastric gland
- D. Von Ebner's gland
- E. Esophageal gland

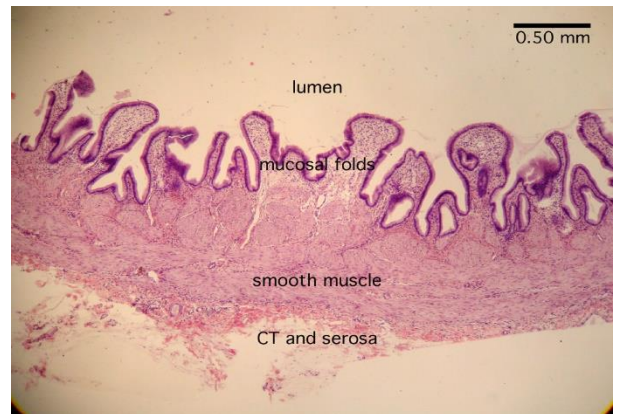
Answer: A



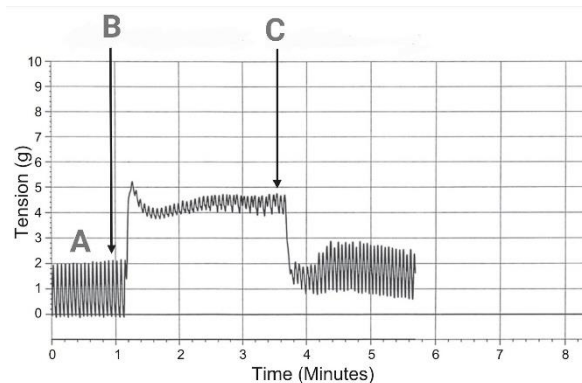
67) Identify this section:

- A. Esophagus.
- B. Duodenum.
- C. Colon.
- D. Appendix.
- E. Gallbladder.

Answer: E



68) The figure below represents Intestinal contractions before and after adding two substances B and C. Which of the following sentences is FALSE?



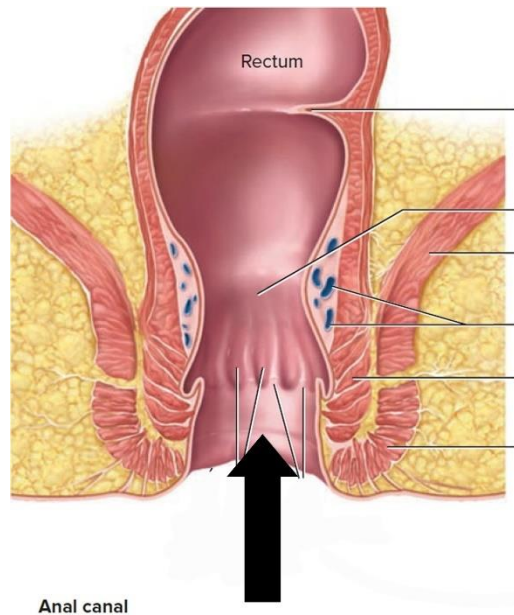
- A. Substance C is a competitive antagonist for substance B.
- B. Substance C can be atropine.
- C. The part of the graph labelled as A represents slow waves without spikes.
- D. Substance B can be acetylcholine.
- E. Substance B effects are mediated by muscarinic receptors.

Answer: C

69) The pointed structure has the following features EXCEPT:

- A. The drainage is to the inferior vena cava.
- B. It is sensitive to pain.
- C. Stratified squamous keratinized epithelium.
- D. The type of hemorrhoid is internal.
- E. It has somatic Innervation.

Answer: D



70) Identify the pointed cells in this section:

- A. Chief cells.
- B. Parietal cells.
- C. Mucous cells.
- D. Paneth cells.
- E. Lymphocytes.

Answer: A

