

ANA 121 MIDYEAR EXAM

1st Semester 1429-1430 (2008-2009)

- The internal thoracic artery:
 - Terminates as inferior phrenic and inferior epigastric arteries.
 - Descends behind the sternum.
 - Is a branch of the axillary artery.
 - Is accompanied by the azygos vein on its right side.
 - Ends in the 6th intercostal space.
- Regarding the trachea, one statement is **WRONG**:
 - It bifurcates at the level of sterna angle, (lower border of T4).
 - Carnia of the trachea could be seen through the bronchoscope.
 - In deep inspiration carnia ascends upwards.
 - Arch of the aorta lies in front, and on the left side of the trachea.
 - Arch of the azygos vein lies on the right side of the trachea.
- Regarding the conducting system of the heart
 - Impulse of cardiac contraction spontaneously begins in the sinuatrial node.
 - Sinuatrial node may be supplied by the left coronary artery.
 - Sympathetic nerves to the heart slow the heart rate.
 - Atrioventricular bundle is the only pathway for conduction between atria and ventricles.
 - Atrioventricular bundle descends behind the septal cusp of the tricuspid valve.
- Regarding surface anatomy and auscultation of the heart valves, choose the **CORRECT** statement:
 - Tricuspid valve lies behind the left half of the sternum.
 - Aortic valve lies behind the right half of the sternum.
 - Mitral valve lies behind the left half of the sternum opposite the 3rd intercostal.
 - Pulmonary valve is best heard at the medial end of the 2nd left intercostal space.
 - Aortic valve is best heard over the apex beat.
- Concerning the innervations of the thoracic structures, all of the following are true, **EXCEPT**:
 - The lung and visceral pleura are supplied by autonomic nerves.
 - Motor innervation for the diaphragm is from phrenic nerve.
 - Innervation of the mucous membrane of the trachea is from the vagi.
 - The lower 6 intercostal nerves give motor innervations to the periphery of the diaphragm.
 - The sinuatrial receives fibers from the cardiac plexuses.
- Blood clot (embolus) in which one of the following veins cannot reach the left lung:
 - Right subclavian.
 - Azygos.
 - Inferior vena cava.
 - Left pulmonary vein.
 - Superior vena cava.

7. Regarding the bronchopulmonary segments:
- A. The base of each segment is directed towards the lung root.
 - B. The segmental artery runs in the connective tissue between the segments.
 - C. A diseased segment could be removed surgically without damaging the adjacent segments.
 - D. The middle lobe of the right lung has 3 segments.
 - E. Each segment receives a secondary bronchus.
8. Concerning the right lung, choose the **INCORRECT** statement:
- A. Its horizontal fissure demarcates between the superior and the middle lobes.
 - B. Its lymphatic passes to its hilum by superficial and deep lymphatic plexuses.
 - C. The pulmonary ligament allows the vessels to move during respiratory movement.
 - D. Its visceral pleura is sensitive to pain and temperature.
 - E. Its bronchial veins drain into the azygos vein.
9. The esophagus:
- A. Is supplied partly by the inferior thyroid artery.
 - B. Is crossed by the right principal bronchus.
 - C. Is related anteriorly to the descending thoracic aorta at its lower end.
 - D. Is related to the thoracic duct along its right border.
 - E. Is related anteriorly to the transverse pericardial sinus.
10. Concerning the abdominal wall, choose the **INCORRECT** statement:
- A. The internal oblique fibers continue into the scrotum as cremasteric muscle.
 - B. The epigastric vessels run behind the rectus abdominis muscle.
 - C. Its lymphatic above the level of the umbilicus drain into the axillary lymph nodes.
 - D. The skin around the umbilicus is supplied by the subcostal.
 - E. Pyramidalis muscle arises from the front of the pubis.
11. Which one of the following structures doesn't belong to the external oblique muscle and its aponeurosis?
- A. Inguinal ligament.
 - B. Lacunar ligament.
 - C. Superficial inguinal ring.
 - D. Conjoint tendon.
 - E. External spermatic fascia.
12. Regarding the inguinal canal:
- A. Its anterior wall is formed by the internal oblique muscle along its whole length.
 - B. Its posterior wall is formed by the conjoint tendon along its lateral part.
 - C. Its floor is formed by the inguinal ligament along its entire length.
 - D. The deep inguinal ring lies in the transversus abdominis.
 - E. Its well developed in females than in males.
13. Which of the following structures does not cover the spermatic cord?
- A. External spermatic fascia.
 - B. Internal spermatic fascia.
 - C. Cremasteric fascia.
 - D. Tunica vaginalis.
 - E. Cremasteric muscle.
14. Which one of the structures forms the posterior boundary of the epiploic foramen?
- A. Duodenum.
 - B. Lesser omentum.
 - C. Stomach.
 - D. Inferior vena cava.
 - E. Transverse colon.

15. The lesser omentum:
- A. Extends inferiorly as far as the transverse colon.
 - B. Separates the lesser sac of peritoneal cavity from the greater sac.
 - C. Contains the left and right gastroepiploic vessels.
 - D. Its free border contains the hepatic veins.
 - E. Attached superiorly to the fissure for ligamentum teres.
16. Perforating ulcer of the posterior wall of the stomach body may erode one of the following arteries:
- A. Right gastroepiploic.
 - B. Splenic.
 - C. Hepatic.
 - D. Left gastroepiploic.
 - E. Gastroduodenal.
17. Regarding the spleen:
- A. Its long axis lies along the shaft of the 10th rib.
 - B. Its lower pole can be easily palpated in normal healthy person.
 - C. The gastrosplenic ligament carries the tail of the pancreas.
 - D. The splenic vein runs along the upper border of the pancreas.
 - E. It is related posteriorly to the last two ribs.
18. Regarding the abdominal part of the esophagus:
- A. It enters the abdomen by passing through the left crus of the diaphragm.
 - B. It is supplied by the short gastric arteries.
 - C. It is a site for portosystemic anastomosis.
 - D. It pierces the diaphragm slightly to the right of the median plane.
 - E. The right vagus nerve lies on its anterior surface.
19. The following structure lie posterior to the stomach, **EXCEPT**:
- A. Diaphragm.
 - B. Left supra renal gland.
 - C. Greater sac.
 - D. Transverse mesocolon.
 - E. Pancreas.
20. Regarding the thoracic duct all of the following statements are true, **EXCEPT**:
- A. It ascends to the thorax through the esophageal opening of the diaphragm.
 - B. It ascends on the right side of the descending thoracic aorta.
 - C. It crosses the middle line behind the esophagus.
 - D. It conveys all lymph from the lower limb.
 - E. It conveys lymph from the left upper limb.
21. Regarding the thoracic part of the sympathetic trunk, choose the **INCORRECT** statement:
- A. It is continuous above with the cervical part of the sympathetic trunk.
 - B. It is most laterally placed structure in the mediastinum.
 - C. It descends on the shafts of the ribs.
 - D. It often possesses 11 ganglia.
 - E. The first ganglion is often fused with the inferior cervical ganglion.
22. Regarding the aorta choose the **INCORRECT** statement:
- A. The ascending aorta lies within the fibrous pericardium.
 - B. The aortic arch lies behind the manubrium sterni.
 - C. The descending aorta lies in the posterior mediastinum.
 - D. The aortic arch lies in the superior mediastinum.
 - E. The ascending aorta lies in the anterior mediastinum.

23. The descending thoracic aorta gives all of the following arteries, **EXCEPT**:
- A. Subcostal.
 - B. First posterior intercostal.
 - C. Esophageal.
 - D. Bronchial.
 - E. Pericardial.
24. Regarding the phrenic nerves, choose the **INCORRECT** statement:
- A. They arise from the dorsal rami of C3, 4 & 5 in the neck.
 - B. The left nerve descends along the left subclavian vein.
 - C. They are the sole nerve supply of the diaphragm.
 - D. They carry sensory fibers from the fibrous pericardium.
 - E. They descend in front of the lung root.
25. Pyramidalis muscle is supplied by:
- A. Iliohypogastric nerve.
 - B. Ilioinguinal nerve.
 - C. Subcostal nerve.
 - D. Genitofemoral nerve.
 - E. 10th intercostal nerve.
26. The spermatic cord contains all of the following structures, **EXCEPT**:
- A. Pampiniform plexus of veins.
 - B. Testicular artery.
 - C. Genital branch of the genitofemoral nerve.
 - D. Vas deference.
 - E. Ilioinguinal nerve.
27. In tapping of a Hydrocele, the needle will penetrate all of the following layers, **EXCEPT**:
- A. Skin.
 - B. Dartos muscle.
 - C. Colles' fascia.
 - D. Tunica albuginea.
 - E. Parietal layer of the tunica.
28. Penetrating wound close to the lower part of the right border of the body of the sternum would most likely damage the:
- A. Right ventricle.
 - B. Left atrium.
 - C. Right atrium.
 - D. Left ventricle.
 - E. Pulmonary artery.
29. Cardiac pain is mediated through:
- A. Carotid branch of the glossopharyngeal nerve.
 - B. Greater splanchnic nerve.
 - C. Phrenic nerve.
 - D. Vagus nerve.
 - E. Upper four thoracic spinal nerves.
30. Regarding the pericardium, all of the following are correct, **EXCEPT**:
- A. The fibrous pericardium is fused with the central tendon of the diaphragm.
 - B. The oblique sinus of the pericardium lies in front of the posterior mediastinum.
 - C. The transverse sinus of the pericardium lies behind the aorta and the pulmonary trunk.
 - D. The fibrous pericardium is innervated by the phrenic nerve.
 - E. The parietal layer of the pericardium is innervated by the vagus nerve.