



THE GOOFY ANATOMIST QUIZZES

4. ARTERIES AND VEINS

Q1. Which of the following statements is true?

- A. The brachiocephalic trunk divides into the right subclavian artery and right common carotid artery.
- B. The brachiocephalic trunk divides into the right subclavian artery and the left common carotid artery.
- C. The brachiocephalic trunk divides into the left subclavian artery and the right common carotid artery.
- D. The brachiocephalic trunk divides into the left subclavian artery and the left common carotid artery.

Q2. What structures do the common carotid arteries supply?

- A. Root of the neck, clavicular region and sternal region.
- B. Scalp, face and brain.
- C. Arms.
- D. Posterior thoracic wall.

Q3. Identify the first four branches off the left subclavian artery.

- A. Left vertebral, left common carotid, left axillary, left thyrocervical.
- B. Left vertebral, right common carotid, left axillary, left costocervical.
- C. Left common carotid, left thyrocervical, left axillary, left internal thoracic.
- D. Left vertebral, left internal thoracic, left thyrocervical, left costocervical.

Q4. The descending aorta...

- A. Gives rise to the anterior intercostal arteries.
- B. Gives rise to the posterior intercostal arteries.
- C. Gives rise to the internal thoracic arteries.
- D. Gives rise to the coronary arteries.

Q5. Name the three arteries that branch off the aortic arch.

- A. Brachiocephalic trunk, right common carotid, left subclavian.
- B. Left brachiocephalic artery, left common carotid, left subclavian.
- C. Right subclavian, right common carotid, left common carotid.
- D. Brachiocephalic trunk, left common carotid, left subclavian

Q6. Where do the internal thoracic vessels run?

- A. Inferiorly, down the posterior abdominal wall.
- B. Posterolateral to the sternum, behind the costal cartilages.
- C. In the costal groove of each rib.
- D. Under the length of the clavicle.

Q7. Which of the following statements is true?

- A. The costocervical trunk gives off a branch that supplies the first and second intercostal spaces.
- B. The thyrocervical trunk gives off two branches that travel inferiorly to supply the first, second and third intercostal spaces.
- C. The vertebral artery runs inferiorly alongside the spinal cord.
- D. The axillary artery is a continuation of the vertebral artery.

Q8. Where do the 3rd – 12th posterior intercostal arteries arise?

- A. From the costocervical trunk.
- B. From the ascending aorta.
- C. From the internal thoracic artery.
- D. From the descending aorta.

Q9. Where do the anterior intercostal arteries arise?

- A. From the descending aorta.
- B. From the internal thoracic artery and the musculophrenic artery.
- C. From the superior epigastric artery.
- D. From the descending aorta.

Q10. Which of the following statements regarding venous drainage is true?

- A. The right brachiocephalic vein drains the upper six posterior intercostal veins.
- B. The left brachiocephalic vein drains the superior hemiazygous vein.
- C. The second, third and fourth posterior intercostal veins on both sides are drained by the superior intercostal vein.
- D. The two subclavian veins unite to form the superior vena cava.

Q11. The azygous vein...

- A. Runs on the right anterolateral aspect of the vertebral column.
- B. Drains the superior vena cava.
- C. Drains the inferior vena cava.
- D. Drains 90% of the head and neck.

Q12. Which of the following statements is false?

- A. The superior/accessory hemiazygous vein drains the left 5th – 8th posterior intercostal veins.
- B. The inferior hemiazygous vein drains the left 9th – 11th posterior intercostal veins and the subcostal vein.
- C. The azygous vein drains the right 5th – 11th posterior intercostal veins and the subcostal vein.
- D. The superior/accessory hemiazygous vein drains into the azygous vein.

Q13. What is the venous drainage of the first intercostal space on the left?

- A. The left superior intercostal vein.
- B. The left supreme intercostal vein.
- C. The left hemiazygous vein.
- D. None of the above.

Q14. The right supreme intercostal vein drains into...?

- A. The right brachiocephalic vein.
- B. The right subclavian vein.
- C. The superior vena cava.
- D. The azygous vein.

Answers

Q1. Which of the following statements is true?

- A. The brachiocephalic trunk divides into the right subclavian artery and right common carotid artery.**
- B. The brachiocephalic trunk divides into the right subclavian artery and the left common carotid artery.
- C. The brachiocephalic trunk divides into the left subclavian artery and the right common carotid artery.
- D. The brachiocephalic trunk divides into the left subclavian artery and the left common carotid artery.

Remember that the three branches off the aortic arch are the brachiocephalic trunk, the left common carotid artery and the left subclavian artery. The brachiocephalic trunk gives rise to the right common carotid artery and right subclavian artery.

Q2. What structures do the common carotid arteries supply?

- A. Root of the neck, clavicular region and sternal region.
- B. Scalp, face and brain.**
- C. Arms.
- D. Posterior thoracic wall.

The common carotid travels superiorly and divides to become the internal carotid (supplies the brain) and the external carotid (supplies superficial head and neck).

Q3. Identify the first four branches off the left subclavian artery.

- A. Left vertebral, left common carotid, left axillary, left thyrocervical.
- B. Left vertebral, right common carotid, left axillary, left costocervical.
- C. Left common carotid, left thyrocervical, left axillary, left internal thoracic.
- D. Left vertebral, left internal thoracic, left thyrocervical, left costocervical.**

Q4. The descending aorta...

- A. Gives rise to the anterior intercostal arteries.
- B. Gives rise to the posterior intercostal arteries.**
- C. Gives rise to the internal thoracic arteries.
- D. Gives rise to the coronary arteries.

Can't be A, because the anterior intercostal arteries arise from the internal thoracic arteries. Can't be C, for the same reason. Can't be D, because the coronary arteries arise from the ascending aorta.

Q5. Name the three arteries that branch off the aortic arch.

- A. Brachiocephalic trunk, right common carotid, left subclavian.
- B. Left brachiocephalic artery, left common carotid, left subclavian.
- C. Right subclavian, right common carotid, left common carotid.
- D. Brachiocephalic trunk, left common carotid, left subclavian**

Q6. Where do the internal thoracic vessels run?

- A. Inferiorly, down the posterior abdominal wall.
- B. Posterolateral to the sternum, behind the costal cartilages.**
- C. In the costal groove of each rib.
- D. Under the length of the clavicle.

Q7. Which of the following statements is true?

- A. The costocervical trunk gives off a branch that supplies the first and second intercostal spaces.**
- B. The thyrocervical trunk gives off two branches that travel inferiorly to supply the first, second and third intercostal spaces.
- C. The vertebral artery runs inferiorly alongside the spinal cord.
- D. The axillary artery is a continuation of the vertebral artery.

Can't be B, because the '-thyro'-cervical' trunk supplies the thyroid gland and the neck. Can't be C, because the vertebral artery runs superiorly to supply the brain. Can't be D, because the axillary artery is a continuation of the subclavian artery.

Q8. Where do the 3rd – 12th posterior intercostal arteries arise?

- A. From the costocervical trunk.
- B. From the ascending aorta.
- C. From the internal thoracic artery.
- D. From the descending aorta.**

Posterior IC arteries arise from the descending aorta, and the anterior IC arteries arise from the internal thoracic arteries (and the musculophrenic arteries).

Q9. Where do the anterior intercostal arteries arise?

- A. From the descending aorta.
- B. From the internal thoracic artery and the musculophrenic artery.**
- C. From the superior epigastric artery.
- D. From the descending aorta.

Q10. Which of the following statements regarding venous drainage is true?

- A. The right brachiocephalic vein drains the upper six posterior intercostal veins.
- B. The left brachiocephalic vein drains the superior hemiazygous vein.
- C. The second, third and fourth posterior intercostal veins on both sides are drained by the superior intercostal vein.**
- D. The two subclavian veins unite to form the superior vena cava.

Can't be A, because the right brachiocephalic vein is ultimately draining the head and neck – it is continuous with the right subclavian vein. Can't be B, because the left brachiocephalic vein is draining the head and neck (and the superior intercostal vein too).

Q11. The azygous vein...

- A. Runs on the right anterolateral aspect of the vertebral column.**
- B. Drains the superior vena cava.
- C. Drains the inferior vena cava.
- D. Drains 90% of the head and neck.

The azygous vein is on the right side of the thorax, the hemiazygous veins are on the left side.

Q12. Which of the following statements is false?

- A. The superior/accessory hemiazygous vein drains the left 5th – 8th posterior intercostal veins.
- B. The inferior hemiazygous vein drains the left 9th – 11th posterior intercostal veins and the subcostal vein.
- C. The azygous vein drains the right 5th – 11th posterior intercostal veins and the subcostal vein.
- D. The superior/accessory hemiazygous vein drains into the azygous vein.**

The superior hemiazygous vein crosses the vertebral column (at approx T8) and drains into azygous vein.

Q13. What is the venous drainage of the first (posterior) intercostal space on the left?

- A. The left superior intercostal vein.
- B. The left supreme intercostal vein.**
- C. The hemiazygous vein.
- D. None of the above.

The supreme intercostal vein drains the first (posterior) intercostal space. The superior intercostal vein drains the second, third and fourth (posterior) intercostal spaces. The hemiazygous vein drains the left fifth, sixth, seventh and eighth (posterior) intercostal spaces.

Q14. The right supreme intercostal vein drains into...?

- A. The right brachiocephalic vein.**
- B. The right subclavian vein.
- C. The superior vena cava.
- D. The azygous vein.

The supreme intercostal vein on each side drains into the brachiocephalic vein of that side.