

Pathology MCQs Week 5

1. Thoracic aortic dissection:

- Answer A Is classified as a Type B dissection when it commences just proximal to the left subclavian artery
- Answer B Is commonest in hypertensive men aged 60-70yrs
- Answer C Is caused by atheromatous plaque fracture
- Answer D Is usually managed conservatively when Type A
- Answer E Is associated with cystic medial degeneration

2. Acute myocardial infarction:

- Answer A Is caused by embolisation of atherosclerotic thrombus in 90% of cases
- Answer B Involving transmural infarction has the same prognosis as subendocardial infarction
- Answer C Is complicated by arrhythmias in 50% of cases
- Answer D Is found to be the cause of 25% or less cases of sudden cardiac death
- Answer E Treated with thrombolysis has patency re-established in 95% of cases

3. The tendency to ventricular fibrillation following an acute myocardial infarct:

- Answer A Peaks at the 30 mins post infarct
- Answer B Is partly attributed to the rapid increase in K⁺ in extracellular fluid around the cardiac muscle fibres.
- Answer C Is partly attributed to electric current flow to the ischaemic area, the “injury current”
- Answer D Is caused by powerful parasympathetic reflexes.
- Answer E Does not alter with the size of the infarct.

4. Atherosclerotic plaques:

- Answer A. Are found more commonly in the thoracic aorta than the abdominal aorta.
Answer B Contain foam cells predominantly derived from smooth muscle cells.
Answer C Almost always undergo calcification in advanced disease.
Answer D Can cause aneurysmal dilatation due to weakening of the intima.
Answer E Can have their progression slowed by reducing cholesterol, but will never regress.

5. Peripheral oedema in acute heart failure is due to all of the following EXCEPT:

- Answer A Decreased GFR
Answer B Increased aldosterone
Answer C Activation of the renin-angiotensin system
Answer D Rise in peripheral capillary pressure
Answer E Decreased ANF

6. In hypovolaemic shock, which of the following is FALSE?

- Answer A Sympathetic reflexes double the capacity to tolerate blood loss
Answer B The CNS ischaemic response is activated when BP falls to 70mmHg
Answer C Cerebral and coronary blood flow are maintained sometimes at the expense of cardiac output
Answer D Vasopressin is activated to increase water retention by the kidneys
Answer E Progressive shock can be halted by aggressive fluid replacement

Answers Pathology Week 5

1. E
2. D
3. B
4. C
5. D
6. B