

PATHOLOGY - Vascular

1. Vascular endothelial injury is associated with
 - A: extracellular matrix synthesis within the intima ✓
 - B: migration of medial smooth muscle cells to the adventitia
 - C: suppression of smooth muscle cell mitosis
 - D: vascular wall thinning

2. Mr B.P. has hypertension whenever he presents to ED, but refuses to take medication. Eventually he is most likely to perish from
 - A: aortic dissection
 - B: haemorrhagic stroke
 - C: myocardial infarction ✓
 - D: renal failure

3. A 25 year old man presents with headache and a BP of 200/130. His BP 6 months ago was 110/80 (and his drug screen is negative!). The most common cause of secondary hypertension is
 - A: glomerulonephritis
 - B: Liddle syndrome
 - C: pheochromocytoma
 - D: primary hyperaldosteronism ✓

4. 59 year old Mrs M.I. presents with chest pain and ECG changes after a long hike with her octogenarian parents. She is a nonsmoker with normal BP, BSL and lipid levels. Some suspected additional risk factors for atherosclerosis include
 - A: bacterial infection
 - B: elevated CRP levels ✓
 - C: elevated HDL levels
 - D: low circulating homocysteine levels

5. A population of jolly macrophages have taken up residence in an atherosclerotic plaque. Their activities include
 - A: collagen formation
 - B: erosion of the fibrous cap
 - C: formation of foam cells ✓
 - D: induction of superoxide dismutase

6. An advanced yet preclinical atherosclerotic plaque is likely to show
 - A: calcification ✓
 - B: fibrofatty morphology
 - C: localised rupture
 - D: mural thrombosis

7. The most common site of atherosclerosis is
- A: abdominal aorta ✓
 - B: coronary arteries
 - C: popliteal artery
 - D: thoracic aorta
8. A 6'4" basketballer presents with tearing chest & inter scapular pain. While you wait for the Sonosite to reboot, you ponder the pathogenesis of Marfan syndrome. It is due to
- A: altered collagen cross-linking
 - B: defective fibrillin synthesis ✓
 - C: defective type 3 collagen synthesis
 - D: increased matrix metalloprotease expression
9. You have a functional ultrasound machine and you see that the distressed basketball from Question 8 has pericardial fluid. His aortic aneurysm is
- A: DeBakey Type 2 (but not Type 1)
 - B: DeBakey Type 3
 - C: (Stanford) Type A ✓
 - D: (Stanford) Type B
10. Immune complex associated vasculitis
- A: affects medium vessels only
 - B: can occur in meningococcaemia
 - C: is associated with antineutrophil cytoplasmic antibodies ✓
 - D: may be caused by syphilis
11. A grumpy toddler with fever and rash presents with his mum who has been googling Kawasaki disease. Features suggestive of this would be
- A: enlarged tonsils
 - B: hepatosplenomegaly
 - C: loss of peripheral pulses
 - D: rash to the hands and feet ✓
12. It's a freezing winter morning ward round and you notice Ms Med Student has pale, blue-tinged fingers. You suspect
- A: Buerger disease
 - B: hypothermia
 - C: primary Raynaud phenomenon ✓
 - D: subclavian steal

13. The most common vasculitis afflicting the elderly is
- A: giant cell arteritis ✓
 - B: polyarteritis nodosa
 - C: systemic lupus erythematosus
 - D: Wegener granulomatosis
14. Churg-Strauss disease can present with
- A: aortic dissection
 - B: desquamating rash
 - C: gastrointestinal bleeding ✓
 - D: polyarthritis
15. Your EMU patient with an infected insect bite has red painful streaks on his calf. The affected lymphatics contain
- A: fibrin webs
 - B: lymphocytes and macrophages
 - C: neutrophils and monocytes ✓
 - D: necrotic debris
16. Vasculitis involving the aortic arch is likely to be due to
- A: Behcet disease
 - B: Kawasaki disease
 - C: polyarteritis nodosa
 - D: Takayasu arteritis ✓