

## Pathology.

1. Regarding the normal cell:
  - a. Glycolysis occurs in the cytoplasm
  - b. 60% of ATP is (?used/stored/generated) in the mitochondria
  - c. Final step is  $O_2$  through ADP-ATP synthase
  - d.  $H^+$  diffuses out of mitochondria
2. Melanoma
  - a. Invades local lymphatics
  - b. Spreads superficially ... some more specifics
  - c. Has irregular pigmentation and nodular appearance
3. Heart Valves:
  - a. AS is the most common lesion
  - b. Mitral prolapse does not increase risk of endocarditis
  - c. In severe AS the valve area is less than  $4cm^2$ .
  - d. Rheumatic disease affects ? valve
4. Acute endocarditis
  - a. Virulent organism
  - b. Not in IV drug users
  - c. Isn't bacterial
  - d. Good prognosis
5. Chronic renal failure:
  - a. Total GFR increased
  - b. Flow in loop is slower
  - c. There is hyperplasia
  - d. Vascular dilation
6. Immune thrombocytopenic purpura (?is associated with?)
  - a. HIV
  - b. Meningococcal disease
  - c. Heinrich Shonlein
  - d. DIC
7. Epidural Haemorrhage
  - a. Rupture of middle meningeal
  - b. Without # in kids
  - c. Bleed under venous pressure
  - d. Time course of symptoms ??
8. Proto-oncogenes
  - a. Onco-genes from proto-oncogenes due to A or B (strongly worded)
  - b. p53 required
9. Renal stones in alkaline urine, most commonly
  - a. Ca
  - b. Struvite
  - c. Mg/Ammonia/ $PO_4$
  - d. Urate
10. Phagocytosis
  - a. Bacterial killing is  $O_2$  dependant
  - b. Has 2 phases: A then B then C (it was a self terminating answer)
11. What are predominant lymphocytes
  - a. All listed
12. What doesn't cause leukocytosis
  - a. Megaloblastic anaemia
  - b. Cushing's
  - c. Hypoxia
  - d. MI
  - e. Acute viral illness
13. Amniotic fluid embolism
  - a. >80% mortality
  - b. more common in primip
  - c. prolonged labour increases risk

14. Classical pathway of complement activated by:
- Ag-Ab
  - Ag
  - Lecthin
  - Zombie attack
15. Staging tumours
- T1 = carcinoma in situ
  - Grading is better for prognosis
  - There is a universal agreed system
  - M1 & M2 refers to blood borne spread
16. Chronic lead poisoning
- Learning difficulties in kids
  - Closes epiphyses

Pathology.

1. Regarding the normal cell:
  - a. Glycolysis occurs in the cytoplasm - YES
  - b. 60% of ATP is (?used/stored/generated) in the mitochondria - most ATP gen by mitochondria
  - c. Final step is O<sub>2</sub> through ADP-ATP synthase
  - d. H<sup>+</sup> diffuses out of mitochondria
2. Melanoma
  - a. Invades local lymphatics
  - b. Spreads superficially ... some more specifics - no, thickness det prog
  - c. Has irregular pigmentation and nodular appearance
3. Heart Valves:
  - a. AS is the most common lesion -YES
  - b. Mitral prolapse does not increase risk of endocarditis - any v dis does
  - c. In severe AS the valve area is less than 4cm<sup>2</sup> - 2cm<sup>2</sup> normal, severe <0.7cm<sup>2</sup>
  - d. Rheumatic disease affects ? valve -affects MITRAL v
4. Acute endocarditis
  - a. Virulent organism -YES
  - b. Not in IV drug users staph aureus
  - c. Isn't bacterial false
  - d. Good prognosis poor
5. Chronic renal failure:
  - a. Total GFR increased decrease
  - b. Flow in loop is slower ? yes
  - c. There is hyperplasia ? of what
  - d. Vascular dilation ? no
6. Immune thrombocytopenic purpura (?is associated with?)
  - a. HIV
  - b. Meningococcal disease non immune
  - c. Heilich Shonlein no Plt normal/raised
  - d. DIC not immune
7. Epidural Haemorrhage -expand inwards towards brain, lentiform shape (subdural expand along skull)
  - a. Rupture of middle meningeal -YES
  - b. Without # in kids
  - c. Bleed under venous pressure -10% venous
  - d. Time course of symptoms ??
8. Proto-oncogenes
  - a. Onco-genes from proto-oncogenes due to A or B (strongly worded) – proto-oncogenes (GOOD) can become oncogenes (BAD) - when mutated
  - b. p53 required - tumour suppressor
9. Renal stones in alkaline urine, most commonly
  - a. Ca - is most common
  - b. Struvite - IS Mg/ammonia/PO<sub>4</sub>
  - c. Mg/Ammonia/PO<sub>4</sub> - assoc with presence of urease splitting bacteria - makes urine alkaline
  - d. Urate
10. Phagocytosis
  - a. Bacterial killing is O<sub>2</sub> dependant
  - b. Has 2 phases: A then B then C (it was a self terminating answer)
11. What are predominant lymphocytes :T (46% H, 19% C) > B 23% > NK 7%
  - a. All listed T cells
12. What doesn't cause leukocytosis
  - a. Megaloblastic anaemia ?
  - b. Cushings does
  - c. Hypoxia ?no
  - d. MI yes thromboembolic diseases (transient)
  - e. Acute viral illness yes (lymphocytosis)
13. Amniotic fluid embolism
  - a. >80% mortality
  - b. more common in primip
  - c. prolonged labour increases risk

14. Classical pathway of complement activated by:

- a. Ag-Ab
- b. Ag
- c. Lecthin
- d. Zombie attack

15. Staging tumours

- a. T1 = carcinoma in situ - no
- b. Grading is better for prognosis ? no
- c. There is a universal agreed system - ?yes
- d. M1 & M2 refers to blood borne spread - no mets (blood/lymph)

16. Chronic lead poisoning

- a. Learning difficulties in kids ?yes
- b. Closes epiphyses - no, leaves radio-dense deposits in the epiphyses of childrens bones