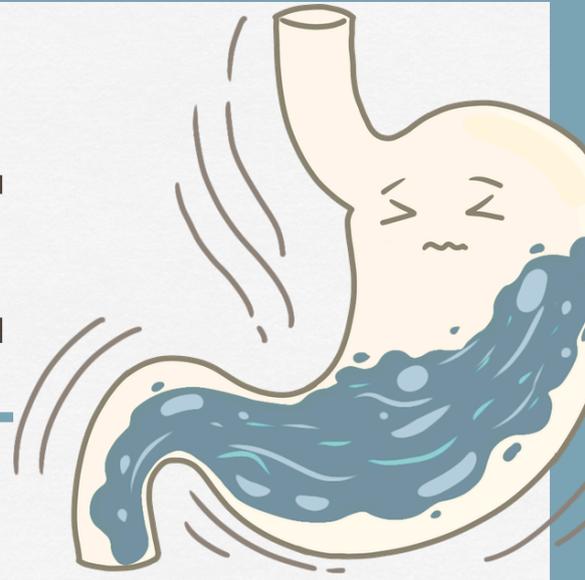


HAKEEM



Pathology-mid

Done by :
Reem

Designed by:
Reem Saadeh



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INTRODUCTION TO PATHOLOGY

Q1. All of the following are related to pathogenesis EXCEPT:

- A. Biochemical alterations
- B. Structural abnormalities
- C. Molecular changes
- D. Etiological factors

✓ Correct answer: D

Q2. A disease caused by misfolded prion proteins is:

- A. Tay-Sachs disease
- B. Cystic fibrosis
- C. Retinitis pigmentosa
- D. Creutzfeldt-Jakob disease

✓ Correct answer: D

☠️ CELL DEATH - NECROSIS

Q3. Which type of necrosis can only be seen microscopically?

- A. Coagulative necrosis
- B. Liquefactive necrosis
- C. Fat necrosis
- D. Fibrinoid necrosis

✓ Correct answer: D

Q4. Which nuclear change occurs first in necrosis?

- A. Karyorrhexis → Karyolysis → Pyknosis
- B. Pyknosis → Karyorrhexis → Karyolysis
- C. Karyolysis → Pyknosis → Karyorrhexis
- D. Pyknosis → Karyolysis → Karyorrhexis

✓ Correct answer: B

Q5. Soap formation (saponification) occurs in which type of necrosis?

- A. Coagulative necrosis
- B. Liquefactive necrosis
- C. Fat necrosis
- D. Fibrinoid necrosis

✓ Correct answer: C

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Q6. Culmination of irreversible cell injury leads to:

- A. Apoptosis**
- B. Necrosis**
- C. Atrophy**
- D. Metaplasia**

✔ **Correct answer: B**

Q7. Saponation of necrotic tissue is characteristic of:

- A. Coagulative necrosis**
- B. Liquefactive necrosis**
- C. Fat necrosis**
- D. Fibrinoid necrosis**

✔ **Correct answer: C**

Q8. Which of the following statements is incorrect?

- A. Dystrophic calcification occurs in necrotic tissue**
- B. Metastatic calcification is associated with hypercalcemia**
- C. Metastatic calcification occurs with normal calcium metabolism**
- D. Renal failure can cause metastatic calcification**

✔ **Correct answer: C**

🧬 **CELL DEATH – APOPTOSIS**

Q9. Which anti-apoptotic protein is involved in the intrinsic pathway?

- A. BAX**
- B. BAK**
- C. BCL-2**
- D. Caspase-9**

✔ **Correct answer: C**

Q10. Which of the following occurs in the intrinsic apoptosis pathway?

- A. Increase of BCL-2**
- B. Inhibition of BH3**
- C. Dimerization of BAX and BAK**
- D. Activation of death receptors**

✔ **Correct answer: C**

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Q11. Pyroptosis results from inflammasome activation leading to release of:

- A. IL-10
- B. IL-1
- C. TNF
- D. IFN- γ

✔ Correct answer: B

Q12. Which of the following is NOT a physiological cause of apoptosis?

- A. Embryogenesis
- B. Turnover of proliferative tissues
- C. Involution of hormone-dependent tissues
- D. Accumulation of misfolded proteins

✔ Correct answer: D

🔄 CELLULAR ADAPTATION TO STRESS

Q13. Which of the following is NOT a cause of atrophy?

- A. Decreased workload
- B. Loss of innervation
- C. Diminished blood supply
- D. Increased endocrine stimulation

✔ Correct answer: D

Q14. Reprogramming of stem cells occurs in:

- A. Hypertrophy
- B. Hyperplasia
- C. Metaplasia
- D. Apoptosis

✔ Correct answer: C

Q15. Which statement regarding hypertrophy is incorrect?

- A. Occurs in response to increased workload
- B. Occurs in non-dividing cells
- C. Pure hypertrophy occurs in gravid uterus
- D. Leads to increased cell size

✔ Correct answer: C

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INFLAMMATION

Q16. What is the major function of LXA4?

- A. Promotion of inflammation
- B. Activation of immune cells
- C. Induction of fever
- D. Suppression of inflammation

✔ Correct answer: D

Q17. Which of the following occurs first after cell injury?

- A. Ultrastructural changes
- B. Loss of cell function
- C. Light microscopic changes
- D. Gross changes

✔ Correct answer: B

Q18. Pericyte separation during inflammation is mediated by:

- A. Histamine
- B. Bradykinin
- C. Nitric oxide
- D. Prostaglandins

✔ Correct answer: C

Q19. Which of the following is NOT a cause of decreased colloid osmotic pressure?

- A. Nephrotic syndrome
- B. Liver failure
- C. Malnutrition
- D. Acute inflammatory reaction

✔ Correct answer: D

Q20. Which of the following is NOT a chemoattractant?

- A. LTB4
- B. Chemokines
- C. C5a
- D. C5b

✔ Correct answer: D

Q21. Which cells are most associated with chronic asthma?

- A. Neutrophils
- B. Eosinophils
- C. Macrophages
- D. Mast cells

✔ Correct answer: B

Q22. Why do neutrophils arrive first at sites of inflammation?

- A. They adhere firmly to selectins
- B. They are the most abundant leukocytes in blood
- C. They survive longer than macrophages
- D. They divide rapidly

✔ Correct answer: B

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✓ MEDIATORS OF INFLAMMATION

Q23. Which cytokine is responsible for maintaining M2 macrophages?

- A. IL-1
- B. IL-12
- C. IL-13
- D. TNF

✓ Correct answer: C

Q24. Which of the following is NOT an acute-phase protein?

- A. Fibrinogen
- B. Amyloid A
- C. CRP
- D. Leukocytes

✓ Correct answer: D

Q25. Which cells produce TGF- β ?

- A. M1 macrophages
- B. M2 macrophages
- C. Neutrophils
- D. Mast cells

✓ Correct answer: B

Q26. The best treatment for autoinflammatory diseases is:

- A. TNF antagonist
- B. IL-1 agonist
- C. IL-1 antagonist
- D. IL-10 antagonist

✓ Correct answer: C

Q27. Which mediator is responsible for erythema?

- A. Leukotrienes
- B. Histamine
- C. Complement C5b
- D. Nitric oxide

✓ Correct answer: B

Q28. Which cytokine is primarily activated by the inflammasome?

- A. IL-6
- B. IL-8
- C. IL-1
- D. TNF

✓ Correct answer: C

Q29. Lymphotactin belongs to which chemokine family?

- A. CC
- B. CXC
- C. CX3C
- D. C

✓ Correct answer: D

Q30. All of the following trigger histamine degranulation EXCEPT:

- A. Physical injury
- B. Heat
- C. C3a
- D. Delayed hypersensitivity reaction

✓ Correct answer: D

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MORPHOLOGIC PATTERNS OF ACUTE INFLAMMATION

Q31. Which of the following is NOT a cellular component of granuloma?

- A. Foreign material
- B. Epithelioid macrophages
- C. Mast cells
- D. Lymphocytes

Correct answer: C

Q32. Skin blister is an example of:

- A. Serous inflammation
- B. Fibrinous inflammation
- C. Suppurative inflammation
- D. Ulcer

Correct answer: A

TISSUE REPAIR

Q33. Persistence of injurious stimulus triggers repair by:

- A. Resolution
- B. Regeneration
- C. Connective tissue replacement
- D. Apoptosis

Correct answer: C

Q34. Hepatocyte proliferation after partial hepatectomy is driven by:

- A. IL-1
- B. TGF- β
- C. HGF
- D. TNF

Correct answer: C

Q35. Which macrophage pairing is incorrect?

- A. Microglia - CNS
- B. Langerhans cells - Skin
- C. Kupffer cells - Liver
- D. White pulp macrophages - Spleen

Correct answer: D

((اللهم يا معلم إبراهيم
علمني ، ويا مفهم سليمان
فهمني ، ويا مصبر ايوب صبرني
، ويا مؤتي لقمان الحكمة اتني
الحكمة وفصل الخطاب ،
اللهم علمني ما ينفعني
وانفعني بما علمتني))