ROBBINS PATHOLOGY CHAPTER 2 MCQs

1. A 50 year old man presented with mild abdominal pain with mildly raised ALT and AST. Fatty liver was suspected, which of the following changes is not seen ultrastructurally in this condition?

A) Generalized swelling of cell and plasma membrane.

B) Nuclear changes such as pyknosis,karyorrhexis and karyolysis are seen.

C) Accumulation of "myelin figures" in the cytosol composed of phospholipids derived from damaged cellular membranes.

D) Dilation of the ER, with detachment of polysomes.

Answer: B Pyknosis, karyorrhexis and karyolysis are classic features of apoptosis

2. What is the mechanism behind plasma membrane swelling in reversible cell injury?

A) Influx of water due to direct damage to Na-K-ATPase pump

B) Plasma menrane damage leading to increased leakiness to sodium ion.

C) Depletion of ATP resulting in oxygen deficiency interfering in Na-K-ATPase pump activity.

D) All of the above

Answer: D

3 Which of the following statements is false regarding necrosis?

A) Necrosis is always pathological

B) Caseous necrosis is most common in the brain

C) Caseous necrosis is characteristic of a tubercular granuloma

D) Morphologically, necrotic cells show increased eosinophilia in a hematoxylin and eosin staining

Answer: B- Liquefactive necrosis occurs in the brain. Caseous necrosis occurs in all organs except the brain

4. Which is not a morphologic feature of apoptosis?

A) **Cell shrinkage and increased eosinophilia**

B) **Cytoplasmic blebbing and apoptosis bodies**

C) **Chromatin condensation**

D) **Presence of acute and chronic inflammatory infiltrate**

Ans D: Presence of inflammation is not seen in apoptosis

5. Which of the following is an example of physiologic apoptosis?

A) **Cell death due to radiation damage**

B) **Reduced cell proliferation by apoptosis of receptors to maintain homeostasis**

C) **Cell death due to infectious process**

D) **Cell death triggered by accumulation of misfolded proteins**

Ans: B- All others are examples of pathologic apoptosis