Test Bank Lecture 2

- 1. Which of the following is an irreversible nuclear change in cell injury?
 - A. Myelin figures
 - B. Cell membrane blebs
 - C. Mitochondrial densities
 - D. karyorrhexis
 - E. Cellular swelling

Answer: D

- 2. Which of the following patterns of necrosis can be caused by focal bacterial and fungal infections?
 - A. Caseous necrosis
 - B. Liquefactive necrosis
 - C. Fibrinoid necrosis
 - D. Fat necrosis
 - E. Coagulative necrosis

Answer: B

- 3. Which of the following patterns of tissue necrosis has granuloma formation and the tissue architecture is completely obliterated and cellular outlines cannot be discerned?
 - A. Coagulative necrosis
 - B. Caseous necrosis
 - C. Liquefactive necrosis
 - D. Fibrinoid necrosis
 - E. Gangrenous necrosis

Answer: B

- 4. Coagulative necrosis is characterized by which of the following?
 - A. Central caseation
 - B. Preserved tissue architecture initially
 - C. Caused by bacterial infections
 - D. Cheesy like material
 - E. Liquified Center

Answer: B

- 5. One of the followings is a REVERSIBLE change in cell injury?
 - A. Myelin figures
 - B. ER dilation
 - C. Mitochondrial changes
 - D. Cellular swelling
 - E. All answer are correct

Answer: E

- 6. Which one of the following could be considered as the "Hallmark of reversible injuries"?
 - A. Loss of DNA and chromatin structural integrity
 - B. Cellular enzyme leakage
 - C. Cellular swelling

- D. Pyknosis
- E. None of the above

Answer: C

- 7. Brain ischemia is characterized by:
 - A. Coagulative necrosis
 - B. Caseous necrosis
 - C. Liquefactive necrosis
 - D. Fibroid necrosis
 - E. Fat necrosis

Answer: C

- 8. Which of the following is typical for apoptosis?
 - A. Disrupted plasma membrane
 - B. Absence of inflammation
 - C. Pyknosis and karyorrhexis
 - D. Leakage of cell components
 - E. Uncontrolled

Answer: B

- 9. Caseous necrosis is most likely found in:
 - A. Peritoneal cavity
 - B. Tuberculosis
 - C. Myocardial infarction
 - D. Pancreatic tissue
 - E. Hepatic tissue

Answer: B

- 10. Which of the following is a mismatch between a disease and the type of necrosis?
 - A. Myocardial Infarction --- Coagulative Necrosis
 - B. Brain Infarction --- Gangrenous Necrosis
 - C. Mycobacterial tuberculosis --- Caseous Necrosis
 - D. Vasculitis --- Fibrinoid Necrosis

Answer: B

11. In the process of necrosis, a reduction in the size of the nucleus and condensation of nuclear material is known as:

Answer: pyknosis

- 12. In which particular order do we see morphological changes of injured tissue?
 - A. Loss of function, cell death, microscopic changes, gross changes
 - B. Loss of function, microscopic changes, cell death, gross changes
 - C. Gross changes, loss of function, cell death, microscopic changes
 - D. Cell death, loss of function, microscopic changes, gross changes

Answer: A

- 13. Which of the following types of necrosis is grossly opaque and chalky white?
 - A. Coagulation necrosis
 - B. Liquefaction necrosis
 - C. Caseous necrosis
 - D. Fat necrosis

E. Gangrenous necrosis

Answer: D

14. Coagulative necrosis caused by:

Answer: Sudden ischemia

- 15. A 68-year-old woman suddenly lost consciousness and on awakening 1 hour later, she could not speak or move her right arm. Two months later, a head CT scan showed a large cystic area in the left parietal lobe. Which of the following pathologic processes has most likely occurred in her brain?
 - A. Apoptosis
 - B. Coagulative necrosis
 - C. Fat necrosis
 - D. Karyolysis
 - E. Liquefactive necrosis

Answer: E

- 16. A screening chest radiograph of an asymptomatic 37-year-old man shows a 3-cm nodule in the middle lobe of his right lung. The nodule is excised with a pulmonary wedge resection, and sectioning shows a sharply circumscribed mass with a soft, white center. The microscopic appearance is shown in the figure. The serum interferon gamma release assay is positive. Which of the following pathologic processes has most likely occurred in this nodule?
 - A. Apoptosis
 - B. Caseous necrosis
 - C. Coagulative necrosis
 - D. Fat necrosis
 - E. Fatty change
 - F. Gangrenous necrosis
 - G. Liquefactive necrosis
 - Answer: B



- 17. A 29-year-old man hospitalized for Acquired Immunodeficiency Syndrome (AIDS) is found to have pulmonary tuberculosis. Which type of necrosis is found in the granulomatous lesions (clusters of modified macrophages) characteristic of this increasingly frequent complication of AIDS?
 - A. Caseous
 - B. Coagulative
 - C. Enzymatic
 - D. Fibrinoid
 - E. Liquefactive

Answer: A

18. A 56-year-old man recovered from a myocardial infarction after his myocardium was entirely "saved" by immediate thrombolytic therapy. If it had been possible to examine microscopic sections of his heart during his ischemic episode, which of the following would be the most likely cellular change to be found?

- A. Karyolysis
- B. Karyorrhexis
- C. Pyknosis
- D. Swelling of the endoplasmic reticulum Answer: D
- 19. A 64-year-old woman presents with fever, chills, headache, neck stiffness, vomiting, and confusion. The Kernig sign (passive knee extension eliciting neck pain) and Brudzinski sign (passive neck flexion eliciting bilateral hip flexion) are both positive. Examination of the cerebrospinal fluid reveals changes consistent with bacterial meningitis, and brain imaging demonstrates a localized abscess. Which of the following types of necrosis is most characteristic of abscess formation?
 - A. Caseous
 - B. Coagulative
 - C. Enzymatic
 - D. Fibrinoid
 - E. Liquefactive

Answer: E

- 20. This figure illustrates the microscopic appearance of the heart of a 56-year-old man who died after a 24-hour hospitalization for severe "crushing" chest pain complicated by hypotension and pulmonary edema. The type of necrosis shown is best described as:
 - A. Caseous
 - B. Coagulative
 - C. Fibrinoid
 - D. Gangrenous
 - E. Liquefactive Answer: B



- 21. *A 37-year-old male with a history of chronic alcohol abuse and gallstones is brought to the emergency room by a friend. The patient has been complaining of severe abdominal pain for 3 days following a bout of increased alcohol consumption. Laboratory testing in the emergency room indicates an elevated amylase and lipase. Despite treatment, the patient dies. An autopsy of the individual most likely will reveal which of the following in the greater omentum?
 - A. Coagulative necrosis
 - B. Liquefactive necrosis
 - C. Gangrenous necrosis
 - D. Caseous necrosis
 - E. Fat necrosis
 - F. Fibrinoid necrosis Answer: E