GENESIS

(Post Graduation Medical orientation Centre)

Exam : Cell Injury & Adaptation_Class Test_FCPS_2020

Class/Chapter :

Total Mark : 100
Pass Mark : 70

Question 26 to End is Based on Single Answers

Time : 5400 Min
Date : 2020-10-26

1. Which are the example of physiological atrophy?
a). a) Senile atrophy
b). b) Atrophy of notochord
c). c) Skeletal muscle atrophy due to prolong bed rest
d). d) Atrophy of breast after menopause
e). e) Pressure atrophy
FTFTF

2. Adaptive hyperplasia found in
a). a) Skeletal muscle
b). b) Brain parenchyma
c). c) Breast stroma
d). d) Endometrial tissue during pregnancy
e). e) Cardiac Muscle
FFTTF

3. Metaplasia
a). a) Cervical metaplasia can cause malignancy
b). b) Irreversible commonly occurs in endometrium
c). c) Is a reversible change
d). d) Because of using ocp
e). e) Undesirable change
TFTTT

4. Squamous cell metaplasia is found in –
a). a) Esophagus
b). b) Gall bladder
c). c) Duct of salivary gland
d). d) Pancreas
e). e) Skeletal metastasis
FTTTF

5. Which are the consequence of ATP depletion
a). a) Influx of K+
b). b) Decrease [H+] conc)
c). c) Increase Glycogen use)
d). d) Influx of H2O
e). e) Increase ROS
FFTTF

6. Reversible cell injury
a). a) Mitochondrial swelling
b). b) Nucleus shrinkage
c). c) Plasma membrane disruption
d). d) Fatty change
e). e) Cellular swelling
TFFTT

7. Increased cystosolic Ca2+ activates
a). a) ↑ Phospholipids
b). b) ↓ Phospholipids
c). c) Disruption of membrane
d). d) Nuclear damage
e). e) Disruption cytoskeletal proteins
FTTTT

8. Restoration of blood flow to an area of ischemia:
a). a) Will result in recovery of irreversibly cells
b). b) Produce reperfusion injury through free radicals
c). c) Cause further cell death by apoptosis
d). d) Prevent further tissue damage by necrosis
e). e) May produce tissue damage through IgM mediated complement activation
FTTFT

9. Example of Caseous necrosis?
a). a) Infarction of brain
b). b) Fungal infection
c). c) Tuberculosis
d). d) Necrosis of pancreas
e). e) Abscess
FTTFF

10. Exact criteria of Necrosis
a). a) Rupture of cell membrane
b). b) Pyknosis
c). c) Fragmentation of nucleus of pyknotic cell
d). d) Formation of cytoplasmic blebs
e). e) Receptor mediated phagocytosis
TTTFF

11. Regarding gangrenous necrosis
a). a) Specific pattern of cell death
b). b) The term commonly used in clinical practice
c). c) Usually applied to a limb
d). d) Lead to coagulative necrosis
e). e) When bacterial information is superiposed there is more liquefactive necrosis occurs
FTTTT

12. Coagulative necrosis of an intra-abdominal organ
a). a) Is a sequelle of acute pancreatitis
b). b) Is indicative of vascular obstruction
c). c) Is commonly caused by coagulase positive staphylococci
d). d) Is always pale
e). e) Can be recognized by microscopic examination
FTFFT

13. Regarding caseous necrosis
a). a) The tissue architecture is completely obliterated and cellular outlines cannot be discerned
b). b) Takes eosinophilic stain
c). c) Lysis of macrophage usually results in formation of non-caseating granuloma
d). d) Is a distinctive type of colliquative necrosis
e). e) Liquefaction of caseous material may occur
TTFFT

14. Moist gangrene occurs in
a). a) Buerger's disease
b). b) Diabetic foot
c). c) Raynaud's disease
d). d) Strangulated bowel
e). e) Testicular torsion
FFFTT

15. Regarding moist gangrene...
a). a) Common sites: Exposed part of body eg. Usually lower Limbs.
b). b) Line of demarcation: Present
c). c) Usually not fatal
d). d) Example: Buerger's disease
e). e) Spread: Very rapid
FFFFT

16. Regarding apoptosis
a). a) Decrease cell size
b). b) Intact membrane
c). c) Surrounding inflammation
d). d) Chromatin condensation
e). e) Receptor mediated phagocytosis
TTFTT

17. Inhibition of apoptosis can result in a number of
a). a) Cancers
b). b) Autoimmune diseases
c). c) Inflammatory diseases
d). d) Viral infections
e). e) Neurodegenerative diseases
TTTFF

18. Necroptosis is seen in
a). a) Acute pancratitis
b). b) Reperfusion injury
c). c) Tuberculosis
d). d) Atrophy of seminiferous tubules
e). e) Parkinson disease
TTFFT

19. Necroptosis
a). a) Morphologically apoptosis
b). b) Mechanically necrosis
c). c) Sometimes called programmed necrosis
d). d) Caspase dependent
e). e) Invariably pathologic
FFTFT

20. Anti oxidants naturally found in the body are
a). a) Calmodulin
b). b) Calcitonin
c). c) Troponin
d). d) Ceruloplasmin
e). e) Transferin
FFFTT

21. Intracellular accumulation of cholesterol are seen in
a). a) Inflammation
b). b) Necrosis
c). c) Apoptosis
d). d) Arteriosclerosis
e). e) Nieman-pick disease,type C
TTFFT

22. Following events may occur with aging changes
a). a) Oxidative phosphorylation is reduced
b). b) Reduction of synthesis of nucleic acids
c). c) Decreased capacity of uptake of nutrients
d). d) Decreased capacity of for repair of chromosomal damage)
e). e) Accumulation of pigments lipofuschin
TTTTT

23. Fatty change occurs in
a). a) Liver
b). b) Heart
c). c) Pancreas
d). d) Kidney
e). e) Lungs
TTFTF

24. Dystrophic calcification occurs in
a). a) Necrotic tissue
b). b) Papillary carcinoma of thyroid
c). c) Multiple myeloma
d). d) Damaged heart valve
e). e) Sarcoidosis
TTFTF

25. Sites of metastatic calcification
a). a) GLT
b). b) Haematoma
c). c) Kidney
d). d) Systemic vein
e). e) Lungs
TFTFT

26. A 45-year-old woman is investigated for hypertension and is found to have enlargement of the left kidney. The right kidney is smaller then normal contrast studies reveal stenosis of right renal artery. The size change in right kidney is an example of which of the following adaptive changes?
a). a) Aplasia
b). b) Atrophy
c). c) Hypertrophy
d). d) Hyperplasia
e). e) Metaplasia
BBBBB

27. Which of the following change is most commonly seen in heart with aging process?
a). a) Brown atrophy
b). b) Red degeneration
c). c) Steatosis
d). d) Heart failure
e). e) Atrial fibrillation
AAAAA

28. Breast feeding during lactational period which following changes occur
a). a) Lobular hyperplasia
b). b) Stromal hypertrophy
c). c) Lobular atrophy
d). d) Stromal atrophy
e). e) Steatocyte atrophy
AAAAA

29. Liquefactive necrosis is seen in
a). a) Brain hypoxia
b). b) Tubercular lymph node
c). c) Abscess
d). d) Ulcer
e). e) Myocardial infarction
TFTFF

30. A 45-year-old woman with a chronic infective lesion on her leg underwent a full-thickness biopsy of the lesion. During histological examination of this lesion a rim of multinuclear giant cells is seen. The central region is most likely to show:
a). a) Caseous necrosis
b). b) Eosinophilic necrosis
c). c) Fibrinous necrosis
d). d) Foam cells
e). e) Pyogenic necrosis
TFFFF

31. A patient is admitted into surgery department with a stabbing injury in left flank. After opening the abdomen surgeon identify that the left renal artery is totally damaged)If immediate repair is not possible ,which type of cell injury may occur in left kidney

32. A 8yrs boy present with para-aortic lymph node on CT abdomen. But now disappear. What process involve?
a). a) Apoptosis
b). b) Phagocytosis
c). c) Necrosis

a). a) Traumatic fat necrosis
b). b) Fibrinoid necrosis
c). c) Apoptosis
d). d) Gnagrenous necrosis
e). e)Coagulative necrosis
EEEEE

d). d) Metaplasia
e). e) Hyperplasia
AAAAA

33. A 71-year-old man diagnosed with pancreatic cancer is noted to have decreasing body mass index. His normal cells comprising skeletal muscle undergo atrophy by sequestering organelles and cytosol in a vacuole followed by fusion with a lysosome) Which of the following processes is most likely occurring in the normal cells but inhibited in the cancer cells of this man?
a). a) Aging
b). b) Apoptosis
c). c) Autophagy
d). d) Hyaline change
e). e) Karyorrhexis
CCCCC

34. In an experiment, cells are subjected to radiant energy in the form of x-rays. This results in cell injury caused by hydrolysis of water. Which of the following cellular enzymes protects the cells from this type of injury?
a). a) Phospholipase
b). b) Glutathione peroxidase
c). c) Endonuclease
d). d) Lactate dehydrogenase
e). e) Protease
BBBBB

35. An adolescence boy 14-16 yrs leads his life style by taking pizza & little physical exercise) Which mechanism occur?
a). a) Hypertrophy of steatocytes
b). b) Fatty metamorphosis of liver
c). c) Apoptosis
d). d) Atrophy of steatocyte
e). e) Metaplasia of oesophagus
BBBBB

36. Fatty changes is most commonly seen in
a). a) Heart
b). b) Liver
c). c) Muscle
d). d) Kidney
e). e) lung
BBBBB

37. A 72-year-old man died suddenly from congestive heart failure) At autopsy, the heart weighed 580 g and showed marked left ventricular hypertrophy and minimal coronary arterial atherosclerosis. A serum chemistry panel ordered before death showed no abnormalities. Which of the following pathologic processes best accounts for the appearance of White granular gritty depositin the aortic valve?
a). a) Amyloidosis
b). b) Dystrophic calcification
c). c) Lipofuscin deposition
d). d) Hemosiderosis
e). e) Fatty change
BBBBB

38. A 45-year-old man with a long history of alcoholism presents with severe epigastric pain, nausea, vomiting, fever, and an increase in serum amylase. Duringa previous hospitalization for a similar episode, computed tomography scanning demonstrated calcifications in the pancreas. A diagnosis of acute pancreatitis superimposed on chronic pancreatitis was made. In this condition, which of the following typesof necrosis is most characteristic?
a). a) Caseous
b). b) Coagulative
c). c) Enzymatic
d). d) Fibrinoid
e). e) Liquefactive
CCCCC

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b). b) Atrophy
c). c) Hyperplasia
d). d) Hypertrophy
e). e) Metaplasia
BBBBB

40. A 35yrs old man is a habitual smoker. If a biopsy is taken from the respiratory tract in this man, the epithelium of respiratory tract is most likely to show:
a). a) Mucous hyperplasia
b). b) Smooth-muscle hyperplasia
c). c) Squamous cell anaplasia
d). d) Squamous cell hypertrophy
e). e) Stratified squamous metaplasia
eeeee

41. After autopsy ,the most likely change you would expect to see in a brain biopsy would be
a). a) Acute haemorrhagic change
b). b) Coagulative necrosis
c). c) Granulomatous change
d). d) Lacunar in fract
e). e) Liquefactive necrosis
EEEEE

42. Which one is not an example of pathlogical hyperplasia
a). a) Hyperplasia after partial hepatectomy
b). b) Benign prostate hyperplasia
c). c) Hyperplasia in wound healing
d). d) Hyperplasia of thyroid follicular cell

43. H2O2is neutralized by
a). a) Superoxide dismutase
b). b)Peroxyredoxin
c). c) Glucose-6-phosphate dehydrogenase
d). d) Catalase

e). e) Skin warts
AAAAA

44. Which one is not common site of metastatic calcification
a). a) Gastric mucosa
b). b) Kidney
c). c) Lungs
d). d) Pulmonary artery
e). e) Systemic artery
DDDDD

46. A 21-year-old man sustained a severe soft tissue injury following a road traffic accident. Which of the Following metabolic effects is most likely to follow this injury
a). a) ↓ aldesterone secretion
b). b) Inhabitation of gluconeogenesis
c). c) Mobilization of fat stores
d). d) Protein anabolism
e). e) Respiratory alkalosis
CCCCC

49. A 36yrs old man sustained a 5cm long incised wound on his forearm during a bar fight. which of the following is not likely to be seen as a complication of healing in this patient?
a). a) Cicatrisation and disfigurement
b). b) Keloid
c). c) Malignancy
d). d) Proud flesh
e). e) Wound dehiscence
CCCCC

e). e) Aldehyde dehydrogenase
DDDDD

45. Which of the following cell changes associate with injury is most likely to be accompanied by disruption of cell membrane
a). a) Apoptosis
b). b) Cloudy swealling
c). c) Coagulative necrosis
d). d) Hydropic change
e). e) Pyknosis
CCCCC

47. A 32-year-old man, working in a power plant, was exposed to radioactive material. He is most likely to suffer radiation injury due to:
a). a) Decreased intracellular Na+
b). b) Decreased intracellular Ca2+
c). c) Free radical formation
d). d) Increased adenosine triphosphate (ATP) production
e). e) Inhibition of protein synthesis
CCCCC

48. A 62-year-old diabetic and hypertensive man suffered a stroke which affected his speech and movement in the right arm and leg. A cerebral angiogram revealed an occlusion of his left middle cerebral artery. Months later, a computed tomographic (CT) scan shows a large, 5-cm cystic area in his left parietal lobe cortex. This CT finding most likely demonstrates a lesion that is the consequence of resolution of which of the following events?
a). a) Apoptosis
b). b) Atrophy
c). c) Caseous necrosis
d). d) Coagulative necrosis
e). e) Liquefactive necrosis
EEEEE

50. Post-menopausal ovarin atrophy is associated with the following structural changes:
a). a) stromal hyperplasia
b). b) loss of ovarian weight
c). c) a proportionate decrease in size of the medulla
d). d) disappearance of primordial follicles
e). e) persistence of the geminal epithelium
CCCCC