



PATHOLOGY

LEC: 1-2-3

The most common form of necrosis :

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

Most often encountered in foci of tuberculosis infection is :

- A. Coagulative necrosis
- B. Liquefactive necrosis
- C. Gangrenous necrosis
- D. Caseous necrosis
- E. Fat necrosis

Which of the following is not an adaptation?

- A. Hypertrophy
- B. Hyperplasia
- C. Atrophy
- D. Fatty change
- E. Metaplasia

Which of the following is not correct about fibrinoid necrosis :

- a. Modern of pathology
- b. Deposition of fibrin-like material within blood vessel walls.
- c. It often occurs in immune-related diseases.
- d. Fibrinoid necrosis can lead to disruption of blood vessel integrity, potentially causing hemorrhage or tissue ischemia.

A D D A

?What is the definition of pathogenesis

- A) The process by which a disease develops and progresses within the body, including the biological mechanisms that lead to the appearance of .symptoms and physiological changes caused by the pathogen
- B) The ability of an organism to resist or defend against harmful .microorganisms or toxins
- C) The study of microorganisms, which are tiny living organisms .like bacteria, viruses, fungi

Example about the pathological hypertrophy:

- A. Skeletal muscle enlargement after exercise
- B. Enlargement of the uterus during pregnancy
- C. Hypertension in cardiomyopathy
- D. Thymic involution after puberty

Proapoptotic protein

- 1. A. BCL-2
- 2. B. BCL-xL
- 3. C. BH3
- 4. D. Bax

8. What changes happen in uterus during pregnancy?

- A. Hypertrophy only
- B. Hypertrophy and Hyperplasia
- C. Hyperplasia only
- D. Apoptosis

A C D B

•A 57-year-old male patient has been smoking 2 packs per day for 25 years
Now presented with chronic productive cough for the past year, during investigations a biopsy from trachea and bronchi showed extensive replacement of the normal ciliated columnar epithelial cells by stratified squamous epithelial cells. Which of the following best describes the changes seen in the patient's biopsy

- A. Infarction
- B. Metaplasia
- C. Hyperplasia
- D. Hypertrophy
- E. Dysplasia

Which of the following cases would most likely present with caseous necrosis

- a. Pulmonary Tuberculosis
- b. Severe hypertension
- c. Acute pancreatitis
- d. Hypoxic and death of cells within the central nervous system
- e. Myocardial infarction

The state of constant/stable internal environment in which the cell is capable of doing its function properly is called

- a. Hemostasis
- b. Apoptosis
- c. Homeostasis
- d. Autophagy
- e. Reversibility

B A. C

:All of the following is correct about hypoxia and ischemia EXCEPT

- a. They are both among the most common causes of cell injury
- b. Hypoxia can also be caused by variety of diseases affecting the lung
- c. Arterial obstruction is the most common cause of ischemia
- d. Every case of ischemia is associated with hypoxia
- e. Anemia is the most common cause of hypoxia

:One of the following is correct about necrosis

- a. If a necrotic tissue is not phagocytized it attracts calcium salts
- b. Necrosis never elicits a local host reaction or inflammation
- c. Necrosis is regulated by specific signals or biochemical mechanisms
- d. A form of cell death in which the cell membrane is kept intact

A 57-year-old male smoker... [same as Q9] (Repeated)

:One of the following is not among the morphologic features of apoptosis

- a. Retains an intact plasma membrane
- b. Elicits inflammation
- c. Apoptotic bodies phagocytized by macrophages
- d. Cell shrinkage
- e. Formation of cytoplasmic buds

A 53-year-old female has experienced severe chest pain for the past 6 hours... irreversible injury to myocardial fibers. Which of the following pathologic processes has most likely occurred in her heart

- a. Apoptosis
- b. Coagulative necrosis
- c. Fat necrosis
- d. Fibrinoid necrosis
- e. Liquefactive necrosis

E A B B

Ultra-Structural changes of reversible cell injury... One of the following is not observed in

reversible cell injury change

- a. Clumping of nuclear chromatin
- b. Disintegration of the DNA
- c. Blebbing and blunting of plasma membrane
- d. Cytoplasmic myelin figures
- e. Dilation of Endoplasmic Reticulum

One of the following is CORRECT about the study of pathology

- a. Morphological changes are only observed through microscopy
- b. Etiology is defined as the mechanism through which diseases develop and progress
- c. Pathology is a branch of Histology
- d. Morphology: The basic structural and functional changes associated with disease
- e. Histopathology is a sequence of events that leads from structural abnormalities to clinical manifestations

Which of following parenchymal organs whose cells have the highest proliferative capacity

- a. Liver
- b. Pancreas
- c. Thyroid gland
- d. Adrenal gland
- e. Lung

A 25-year-old female gave birth... Which of the following processes that occurred in her breasts

during pregnancy enables her to breastfeed the infant

- a. Glandular dysplasia
- b. Stromal hypertrophy
- c. Glandular hyperplasia
- d. Ductal metaplasia
- e. Fatty changes

B D A C

A 40-year-old woman with acute pancreatitis... Which of the following changes is most likely to be present in the mesentery of this patient

- a. Anthracotic pigment
- b. Cheeselike friable yellow-white material
- c. Chalky white changes on gross examination
- d. Bright pink, amorphous material on routine microscopic examination
- e. Dystrophic calcification

Atrophy is shrinkage in the size of cells by the loss of cell substance. Which of the following causes atrophy is a normal physiologic process

- a. Immobilization of a limb to permit healing of a fracture
- b. Loss of innervation after a spinal injury
- c. Atherosclerotic disease affecting the cerebral arteries
- d. Inadequate nutrition in an anorexic patient
- e. Loss of hormone stimulation in menopause

One of the following is incorrect about fatty changes observed in cellular injury

- a. Occurs mainly in hypoxic injury
- b. Seen in organs that involved in fat metabolism
- c. It results from failure of the sodium potassium pump
- d. Most common site is the liver
- e. Manifested by triglyceride containing lipid vacuoles in the cytoplasm

Which of the following changes and consequences that follow cellular injury usually come first

- a. Cell death
- b. Loss of function
- c. Ultra-Structural changes
- d. Gross morphologic changes
- e. Light microscopic changes

C E C B

?Which one of the following is a pro-apoptotic protein

- a. Bax
- b. BCL-2
- c. BCL-XL
- d. Inflammasome
- e. Transaminases

Which of the following mechanisms is responsible for elimination of potentially harmful self-reactive ?lymphocytes to prevent reactions against one's own tissue

- a. Coagulative necrosis
- b. Hypertrophy
- c. Atrophy
- d. Pathologic apoptosis
- e. Physiologic apoptosis

Which of the following is a physician who introduced the correlation of clinical findings (signs ?symptoms) with findings at postmortem examination ,

- a. Adolf Hitler
- b. Rudolf Virchow
- c. Giovanni Morgagni
- d. Gianluigi Buffon
- e. Giovanni de Medici

Hyperplasia is an increase in the number of cells... All of the following is correct about hyperplasia :EXCEPT

- a. It may occur concurrently with hypertrophy
- b. It takes place in tissue contains cells capable of replication
- c. In the liver cells begin compensatory hyperplasia as early as 12 hours after resection
- d. Growth control mechanisms are ineffective in hyperplasia just like in cancer
- e. Pathologic hyperplasia constitutes a fertile soil in which cancers may eventually arise

A E B D

Which of the following is a physician who emphasized that all diseases originate at the cellular level and he is known to be the Father of Modern Pathology

- a. Adolf Hitler
- b. Rudolf Virchow
- c. Giovanni Morgagni
- d. Robert Koch
- e. Robert Hooke

A 34-year-old male with chronic gastric reflux... microscopic examination of an esophageal biopsy revealed intestinal-type columnar epithelium. Which of the following best describes the changes

- a. Infarction
- b. Hypertrophy
- c. Hyperplasia
- d. Metaplasia
- e. Dysplasia

A 72-year-old man... brain CT showed a large cystic area in the right parietal lobe. Which of the following pathologic processes has most likely occurred

- a. Apoptosis
- b. Coagulative necrosis
- c. Fat necrosis
- d. Fibrinoid necrosis
- e. Liquefactive necrosis

Which of the following cases would most likely present with fat necrosis

- a. Myocardial infarction
- b. Severe hypertension
- c. Acute pancreatitis
- d. Hypoxic and death of cells within the central nervous system
- e. Pulmonary tuberculosis

B D E C

Hyperplasia is described as an increase in the number of cells in an organ through proliferation, which can be physiologic or pathologic. One of the following pairs is wrongly matched

- a. Breast glandular epithelium proliferation at puberty → physiologic hyperplasia
- b. Papilloma viruses skin warts → pathologic hyperplasia
- c. Benign prostatic hyperplasia → physiologic hyperplasia
- d. Endometrial hyperplasia → pathologic hyperplasia
- e. Restoring the liver normal size after resection → physiologic hyperplasia

?Which of the following is not among the nuclear change of a necrotic cell

- a. Break down of DNA
- b. Mitosis
- c. Pyknosis
- d. Karyorrhexis
- e. Karyolysis

!All the following is correct about necrosis EXCEPT

- .a. If a necrotic tissue is not phagocytized it attracts calcium salts
- .b. Necrotic cells usually disappear due to enzymatic digestion and phagocytosis
- .c. Necrosis is regulated by specific signals or biochemical mechanism
- .d. Severe disturbances like hypoxia and ischemia cause necrosis
- .e. Necrosis is something called accidental cell death

Hypertrophy is an increase in the size of cells resulting in an increase in the size of the organ. All the following is correct about hypertrophy EXCEPT:

- a. Hypertrophy can be physiologic or pathologic.
- b. It can progress to functionally significant cell injury if the stress is not relieved.
- c. Muscle hypertrophy develops by synthesis of more proteins and myofilaments per cell.
- d. Chiseled physique of weightlifter stems only from hypertrophy.
- e. In some cases it occurs together with hyperplasia like in cardiac muscles.



:All of the following is correct about the study of pathology EXCEPT

- a. Etiology: the mechanism through which diseases develop and progress
- b. Pathogenesis: cellular and molecular changes give rise to abnormalities characterize the disease
- c. Pathogenesis: is the basis of developing rational treatments and effective preventive measure
- d. Morphology: the basic structural and functional changes associated with disease
- e. Morphological changes: could be either observed with the naked eye or microscopy

A 67-year-old female with hypertension... if this patient kept forgetting her medication which of the following cellular alteration would most likely be seen in her myocardium?

- a. Apoptosis
- b. Hypertrophy
- c. Hyperplasia
- d. Hemosiderosis
- e. Fatty changes

All of the follo

A B

يغير الله
في لحظة واحدة
كل الذي
كنت تظنه لن يتغير
فقط ثق بالله