QUIZ Time

Histology 10

Corrected by:rahaf alfogaha

لجنة طب الأسنان

Histology 10

1. What is the approximate volume of blood in an average adult?
(A) about 7L of blood
(B) about 10L of blood
(C) about 3L of blood
(D) about 5L of blood

2. What percentage of blood is made up of plasma?
(A) 45%
(B) 60%
(C) 50%
(D) 55%

3. What is the primary structure of a red blood cell?
(A) oval
(B) spherical
(C) cylindrical
(D) biconcave discs

4. What does an increase in the number of red blood cells indicate?
(A) anemia
(B) polycythemia
(C) leukocytosis
(D) thrombocytopenia

5. How are platelets originally formed?
(A) from red blood cells
(B) from megakaryocytes in the bone marrow
(C) from white blood cells
(D) from plasma

6. What is the normal life span of red blood cells?
(A) 100-120 days
(B) 20-30 days
(C) 3-5 years
(D) 6-12 months

7. What is the main function of erythrocytes?
(A) Defense against infection
(B) Regulation of body temperature
(C) Transport of oxygen and carbon dioxide
(D) Blood clotting

8. By which procedure is a reduction in the staining of red blood cells detected during anemia?
(A) hyperchromic anemia
(B) erythrocytosis
(C) hypochromic anemia
(D) hemolysis

Histology 10

9. What are immature red blood cells called?
(A) Thrombocytes
(B) Leukocytes
(C) Platelets
(D) Reticulocytes

10. What is the function of the glycocalyx on platelets?
(A) storing energy
(B) providing structural integrity
(C) transporting oxygen
(D) increasing surface area for interaction with other cells

11. What does the presence of an increased number of reticulocytes usually suggest?
(A) Water intoxication
(B) Bone marrow failure
(C) Lower oxygen requirements
(D) Increased oxygen-carrying capacity

12. Which cellular structure is involved in platelet movement and aggregation?
(A) ER
(B) microfilaments
(C) dense granules
(D) mitochondria

ANSWERS:
1.D about 5L of blood
2.D 55%
3.D biconcave discs
4.B polycythemia
5.B from megakaryocytes in the bone marrow
6.A 100-120 days
7.C Transport of oxygen and carbon dioxide
8.C
9.D Reticulocytes
10.D increasing surface area for interaction with other cells
11.D
12.B microfilaments

QUIZ Time

Histology 11

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Histology 11

1. What is leukocytosis?
(A) Constant number of WBCs
(B) Decrease in the number of WBCs below 4000 / cubic millimeter
(C)Increase in the number of leukocytes above 11000 / cubic millimeter
(D)Physiological increase in leukocytes during pregnancy

2. What conditions can lead to physiological leukocytosis?
(A) Acute pyogenic infections, acute appendicitis
(B) Lymphopenia
(C) Pregnancy, lactation, after muscular exercise
(D) Exposure to radiation & X-ray

3. What is leucopenia?
(A) Abnormal increase of neutrophils
(B)Increase in the number of WBCs above 11000 / cubic millimeter
(C)Decrease in the number of WBCs below 4000 / cubic millimeter
(D) Increase in eosinophils

4. What types of infections are typically associated with pathological leukocytosis?
(A) Influenza
(B) Allergic reactions
(C) Viral infections resulting in neutropenia
(D) Acute pyogenic infections such as abscess and acute follicular tonsillitis

5. How many types of cytoplasmic granules do granulocytes have?
(A) Three types
(B)None
(C)One type
(D)Two types; specific and non-specific (azurophillic)

6. Which nuclei characteristic is true for neutrophils?
(A) Single, segmented into many lobes
(B) Single, horseshoe-shaped
(C) Single and unsegmented
(D) Single, large and bent into U or S shapes

7. What is the lifespan of neutrophils?
(A) 3-5 days
(B) 8-12 days
(C) Indefinite unless apoptosis occurs
(D) 12-15 days

8. What is neutrophilia?
(A) Increase in the percentage of neutrophils above normal as seen in acute pyogenic infections
(B) Constant percentage of neutrophils
(C) Abnormal increase in eosinophils
(D) Decrease in the percentage of neutrophils below normal

Histology II

9. What do neutrophils release to stimulate macrophages at the site of inflammation?
(A) Macrophage chemotactic factor
(B) Eosinophil chemotactic factor
(C) Dead neutrophils and tissue fluid
(D) Fibroblast chemotactic factor

10. What typically characterizes the nucleus of an eosinophil?
(A)Large and often bent into a U or S shape
(B)Single and segmented into many lobes
(C)Single and bilobed connected by thin chromatin thread
(D) Single and unlobed

11. What causes eosinophilia?
(A) Allergic and parasitic diseases
(B) After cortisone treatment
(C) Decrease in eosinophils
(D) Viral infections

12. What structures are found within the cytoplasm of basophils?
(A) Glycogen and well-developed Golgi bodies
(B)Specific granules containing heparin and histamine
(C)Uniformly sized granules that are purple
(D)Small and green specific granules

ANSWERS
1.C Increase in the number of leukocytes above 11000 / cubic millimeter
2.C Pregnancy, lactation, after muscular exercise
3.c
4.D Acute pyogenic infections such as abscess and acute follicular tonsillitis
5.D One type
6.A Single, segmented into many lobes
7.A 3-5 days
8.D Decrease in the percentage of neutrophils below normal
9.A Macrophage chemotactic factor
10. C
11.A Allergic and parasitic diseases
12.B Specific granules containing heparin and histamine

QUIZ Time

Histology 12

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لجنة طب الأسنان

Histology 12

1. What is the primary function of cartilage in the body?
(A) To store nutrients and minerals
(B) To produce blood cells
(C) To facilitate rapid movements
(D) To bear mechanical stresses without permanent distortion

2. Where is most cartilage typically located in the body?
(A) Within blood vessels and arteries
(B) Surrounded by muscle tissue
(C) Deep within bone marrow
(D) Surrounded by a dense connective tissue called perichondrium

3. What does the perichondrium consist largely of?
(A) Nerve endings and muscle fibers
(B) Osteocytes and mineral deposits
(C) Blood and lymphatic vessels
(D) Collagen type I fibers and fibroblasts

4. What type of cells are progenitor cells for chondroblasts located in?
(A) Within adipose tissue
(B)Inner layer of the perichondrium
(C)Outer fibrous layer of bone
(D)Between layers of muscle tissue

5. In which type of cartilage is the extracellular matrix most commonly found?
(A) Hyaline cartilage
(B) Adipose tissue
(C) Muscle tissue
(D) Blood cells

6. What makes articular cartilage different from other types of cartilage?
(A) Made primarily of elastic fibers
(B) Is highly vascularized
(C) Lacks perichondrium and is sustained by the diffusion of oxygen and nutrients from synovial fluid
(D) Contains a dense arrangement of blood vessels

7. Which is a defining characteristic of hyaline cartilage when fresh?
(A) Bleuswhite and translucent
(B) Dark and elastic
(C) Rigid and opaque
(D) Opaque and yellowish

8. Where can hyaline cartilage typically be found in adults?
(A)In the articular surfaces of movable joints and larger respiratory passages
(B)In the heart muscle tissue
(C)Underneath the epidermis of the skin
(D)Within the ventricles of the brain

Histology 12

9. What is a chondroblast and what happens to it?
(A) A cell that synthesizes proteins and fibers of the matrix, changing into a chondrocyte when trapped inside lacunae
(B) A nerve cell present in tendons
(C) An immune cell involved in joint inflammation
(D) A mature bone cell

10. Which substance in the extracellular matrix of hyaline cartilage binds to type II collagen fibrils?
(A) Aggrecan
(B) Type II collagen itself
(C) Glycoprotein chondronectin
(D) Collagen type I

11. What happens to chondrocytes in hyaline cartilage?
(A) They form nerve endings in the perichondrium
(B) They are less active than chondroblasts and reside in lacunae with deeply stained nuclei
(C) They divide and migrate outside the lacunae
(D) They become bone cells

12. What are the two types of growth for hyaline cartilage?
(A) Longitudinal and lateral growth
(B) Ossification and calcification
(C) Appositional and interstitial growth
(D) Proliferative and regressive growth

ANSWER:
1.D To bear mechanical stresses without permanent distortion
2.D Surrounded by a dense connective tissue called perichondrium
3.D Collagen type I fibers and fibroblasts
4.B Inner layer of the perichondrium
5.A Hyaline cartilage
6.C Lacks perichondrium and is sustained by the diffusion of oxygen and nutrients from
synovial fluid
7.A Bleuswhite and translucent
8.A In the articular surfaces of movable joints and larger respiratory passages
9.A A cell that synthesizes proteins and fibers of the matrix, changing into a chondrocyte when trapped inside lacunae
10.c
11. B
12.C Appositional and interstitial growth