Histology - Blood & Lymphatic System (JU Style)

Blood Histology (50 Questions)

What type of tissue is blood?

Connective tissue

• The fluid part of blood is called?

Plasma

• Which of the following is NOT a formed element of blood?

Albumin

• Shape of RBC?

Biconcave

• Lifespan of RBC?

120 days

• Red color of blood due to?

Iron in hemoglobin

• Which blood cell lacks a nucleus?

Erythrocyte (RBC)

Platelets are fragments of?

Megakaryocyte

• RBC diameter?

7.5 µm

• Reticulocytes are?

Immature RBCs

• Most abundant WBC?

Neutrophil

• Bilobed nucleus, red granules?

Eosinophil

• Releases histamine & heparin?

Basophil

• Lymphocytes classified as?

Agranulocytes

• Monocytes become?

Macrophages

• Kidney-shaped nucleus?

Monocyte

Blood smear stain?

Wright's or Giemsa stain

• Function of neutrophils?

Phagocytosis of bacteria

Multilobed nucleus?

Neutrophil

Basophils correspond to?

Mast cells

Osmotic pressure protein?

Albumin

• Fibrinogen responsible for?

Clotting

Old RBCs destroyed in?

Spleen

• Hematocrit measures?

Percentage of RBCs in blood

• Eosinophils rise in?

Allergy or parasitic infection

• Largest WBC?

Monocyte

Viral infection increases?

Lymphocytes

• Platelets function in?

Blood clotting

• Lymphocyte nucleus shape?

Large and round

Plasma without fibrinogen?

Serum

• Site of hematopoiesis?

Bone marrow

Active marrow type?

Red marrow

• Yellow marrow contains?

Fat

Violet granules cell?

Basophil

• Platelets other name?

Thrombocytes

• Erythropoiesis needs?

Vitamin B12

Segmented nuclei WBCs?

Polymorphonuclear leukocytes

Allergic reaction initiator?

Basophil

• Plasma function?

Transport of nutrients and hormones

• RBC count?

≈5 million/µL

• WBC count?

5,000-10,000/µL

Platelet count?

150,000-400,000/µL

Smallest formed element?

Platelet

• Hyperchromic RBCs?

Contain more hemoglobin

• Hypochromic RBCs?

Contain less hemoglobin

• Macrocytic anemia?

Large RBCs

Microcytic anemia?

Small RBCs

• Poikilocytosis?

Abnormal RBC shapes

· Leukocytosis?

Increased WBC count

• Leukopenia?

Decreased WBC count

Lymphatic Histology (50 Questions)

Lymphoid tissue type?

Reticular connective tissue

• Primary lymphoid organs?

Bone marrow & Thymus

Secondary lymphoid organs?

Lymph nodes, Spleen, Tonsils

• Function of lymph node?

Filter lymph

• Outer region of lymph node?

Cortex

Cortex contains?

B-cell follicles

Medulla contains?

Plasma cells & macrophages

Structural unit of node?

Lymphatic nodule

Afferent lymphatics enter?

Convex surface

• Efferent lymphatic exits at?

Hilum

• Thymus location?

Mediastinum

• Thymus function?

Maturation of T lymphocytes

• Thymus medulla feature?

Hassall's corpuscles

• Spleen filters?

Blood

• White pulp rich in?

Lymphocytes

• Red pulp function?

Destruction of old RBCs

• Splenic artery enters at?

Hilum

Tonsils belong to?

Secondary lymphoid organs

• Peyer's patches found in?

lleum of small intestine

Peyer's patch function?

Immune defense in gut

• Lymphatic vessels transport?

Lymph

• Lymph contains?

WBCs (lymphocytes)

• Thymus has no?

Lymphatic nodules

• Largest lymphoid organ?

Spleen

Germinal center contains?

Activated B cells

• Capsule of lymph node made of?

Dense connective tissue

Lymph sinus function?

Filter lymph

• Thymus active in?

Childhood

Thymus atrophy after?

Puberty

• Lymphatic capillaries lack?

Basement membrane

• Spleen capsule contains?

Smooth muscle and collagen

Macrophages in spleen do?

Phagocytosis of aged RBCs

• White pulp surrounds?

Central arteries

• Lymph enters via?

Afferent vessels

• Lymph exits via?

Efferent vessels

Medullary cords contain?

Plasma cells

• Thymic cortex stains?

Dark (dense lymphocytes)

• Thymic medulla stains?

Light (fewer lymphocytes)

• Splenic cords called?

Cords of Billroth

• Lymphatic system drains into?

Venous circulation

• Thoracic duct drains?

Most of the body

Right lymphatic duct drains?

Right upper quadrant

• Thymus lacks?

B cells

• Lymph node follicles rich in?

B cells

• Paracortex rich in?

T cells

• Tonsil function?

Trap pathogens entering mouth or nose

• Lymphoid tissue made of?

Reticular fibers

• Spleen function?

Blood reservoir

• Lymphocytes function?

Specific immune defense

• Organ with red & white pulp?

Spleen