

HLS Final exam – Doctor 2019

Collected by: Anas Ananzeh, Ahmad Sami, Ehab Roud, Abdullah Alkhamaiseh, Ahmad Alhaj

Theoretical part

Biochemistry:

Q1. Catalyzed by heme oxygenase:

Answer: direct release of iron

Q2. True about ferroportin:

Answer: it's found in different tissues

Q3. True about transferrin?

Answer: It binds with ferric iron

Q4. Wrong about Crigler najjar & Gilbert syndrome:

A. Salicylate can help relieve this condition.

B. stool appears lighter in color

Answer: A

Q5. True about tissue factor:

Answer: It's found on subendothelial cells but not on platelets

Q6. True regarding streptokinase:

Answer: Binds with plasminogen and autoactivates it

Pharmacology:

Q1. The folic acid analog drug which works by inhibiting the enzyme dihydrofolate reductase is effective in leukemia, lymphomas, and sarcomas, but also used in medical abortion, IBD, and rheumatoid arthritis is:

- a. Vincristine
- b. Bleomycin
- c. Methotrexate
- d. Cytarabine
- e. Cyclophosphamide

Answer: C

Q2. All are Heparin side effects except:

Answer: Teratogenicity

Q3. Wrong combination:

Answer: Bleomycin – Cardiotoxicity

Q4. Which of the following is wrong about Warfarin?

Answer: safe in pregnancy

Q5. Wrong about chloroquine:

Answer: difficult to use

Q6. True about folic acid:

Answer: Can induce a remission of pernicious anemia but allowing the neurological disease to progress.

Q7. A drug that clears already formed clots, good after acute Myocardial infarction and very expensive:

Answer: Ateplase

Q8. Low molecular weight heparins are superior to unfractionated heparin. This is due to:

Answer: All of the above

Q9. Wrong about erythropoietin:

Answer: best source is urine of patients with renal failure

PHYSIOLOGY:

Q1. Least popular blood type in Jordan?

Answer: AB

Q2. If the father blood type is A- MN, the mother is B- NN, one of the following can't be their child:

Answer: AB+ NN

Q3. Wrong about hemophilia:

Answer: When the mother is a carrier, all males are hemophilic and half of the females are hemophilic

Q4. Wrong about calcium in coagulation process:

Answer: Calcium is used in all blood clotting stages

Q5. Choose the WRONG statement about Warfarin:

Answer: Warfarin stops its action immediately

Q6. We regulate extra cellular fluid because?

Answer: to maintain normal fluidity/pressure

Q7. Choose the wrong statements regarding blood donation:

Answer: Recipient's blood can't agglutinate mismatch donor blood

Q8. Which of the following is wrong about cross matching:

Answer: We mix Donor's blood with recipient's blood

Q9. Wrong about Thrombocytopenia:

- A. Doesn't affect clot retraction
- B. Whole blood transfusion prevents bleeding for several days
- C. Splenectomy improves this condition
- D. Thrombocytopenic patients bleed as hemophiliacs

Answer: B

Microbiology:

Q1. A 25 year old male, work in military and he is back from U.N, had splenomegaly, Amastigote is seen inside mononuclear cells, he is mostly infected by:

- A. Trypanosoma cruzi
- B. Leishmania donovani

Answer: B

Q2. Infective stage for malaria?

Answer: Sporozoites

Q3. Which of the the following Lymphocytes morphology is a characteristic of HTLV1 infection ?

- A. Downy cells
- B. Saltugilia caruifolia (Flower cells)
- C. Mantle cell
- D. plasmacytoma

Answer: B

Q4. Wrong about malaria:

Answer: There's no vaccine

Q5. Wrong about EBV:

Answer: Latency period inside CD4+ T-cells

Q6. True about Babesiosis:

Answer: Asexual reproduction occurs in white mice

Q7. Regarding drugs used to treat or prevent malaria, which one of the following is most accurate?

Answer: Artemisinin is effective against multi-drug resistant P.falciparum

Pathology:

Q1. Which of the following is not associated with oncogenic viruses:

Answer: follicular lymphoma

Q2. Which of the following can cause reactive lymphadenopathy + granuloma?

Answer: Cat-Scratch disease

Q3. Tumor associated with hemolytic anemia:

Answer: Small lymphocytic lymphoma (SLL)

Q4. low grade neoplasm:

Answer: mycosis fungoides

Q5. Mismatch:

Answer: Thymus - Tax

Q6. not associated with fibroblast:

Answer: AML

Q7. We call it severe Neutropenia when neutrophils count is lower than:

Answer: 500/mm³

Q8. What is decreased in Hemophagocytic lymphohistiocytosis?

Answer: Perforins

Q9. t(15,17) is associated with all of the following except:

Answer: Splenomegaly

Q10. Which of the following won't be helpful with thrombopoietin receptor mutation:

Answer: Won't benefit from imatinib

PBL:

Q1. A 7-year-old boy presents with swollen knee of few days duration. This is not the first time it happens. Both knees and ankles are affected but his right knee is affected most. Symptoms start by feeling of hotness in the joint followed by swelling, pain, reduced ability to move and hot skin. Choose the wrong statement:

Answer: Bone marrow examination

Q2. Wrong complication of Iron deficiency anemia?

Answer: Leg ulcer

Q3. Not seen in Vitamin B12 deficiency:

Answer: Menorrhagia

Practical part

Physio Lab:

Q1. The question provides us with RBC count in 5 squares, Blood is diluted at (1:199), count the RBC in the sample:

Answer: 1,320,000 cells/mm³

Q2. Diagnosis of the previous RBC count:

Answer: Anemia

Q3. The question gives us WBC count in a sample, and the percentage of Neutrophil, then it asks for the absolute count of neutrophils:

Answer: 1560

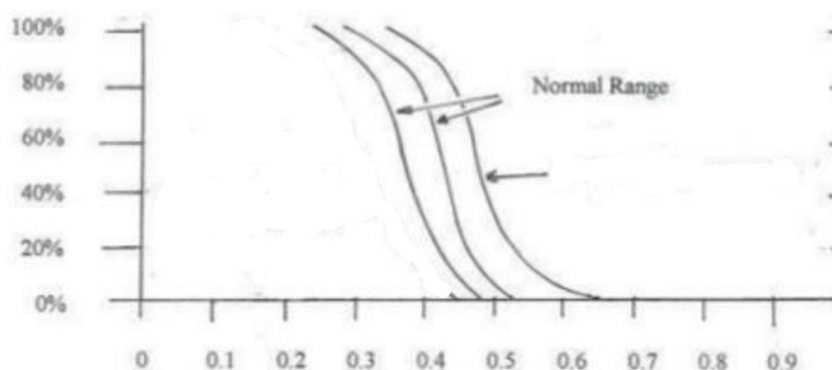
Q4. Related to bleeding time:

Answer: Thrombocytopenia

Q5. Not used in PCV:

Answer: Spectrophotometer

Q6. This photo about osmotic fragility represents:



Answer: Shift to the right, Hereditary spherocytosis

Q7. Wrong about ESR:

Answer: decreases in inflammation

Q8. This blood type is:

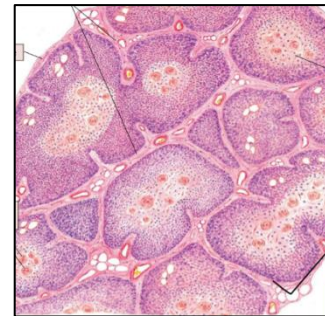
Answer: B+

Histo Lab:



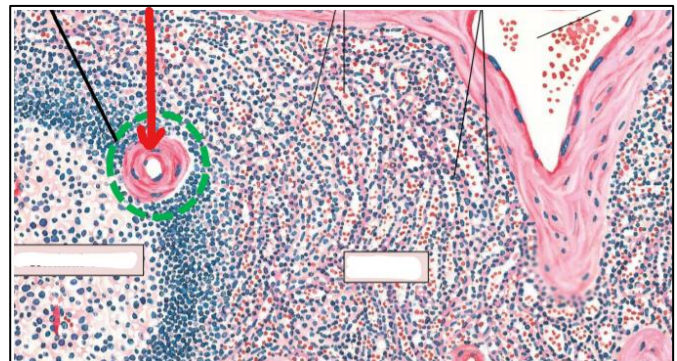
Q1. This section represents:

Answer: Thymus



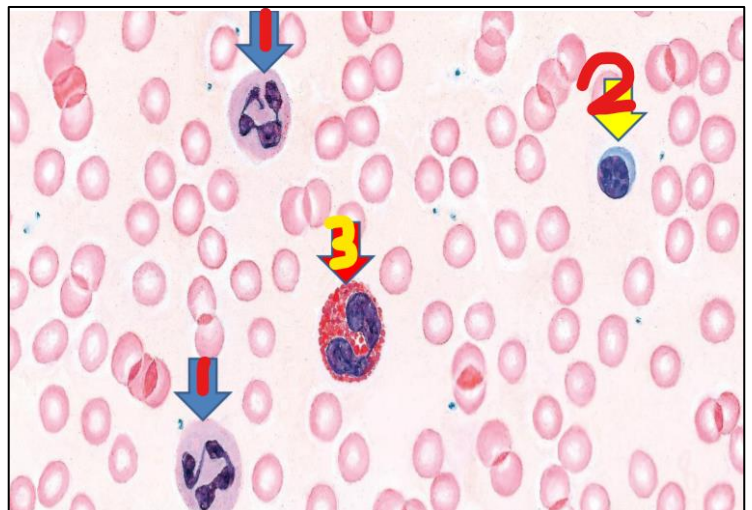
Q2. Red arrow represents:

Answer: Central arteriole



Q3. Most abundant WBC:

Answer: 1



Q4. Which of the following converges at the hilum to form efferent vessels:

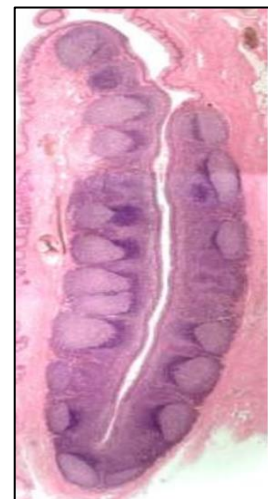
- A. 1
- B. 2
- C. 3
- D. 4

Answer: A



Q5. This section represents:

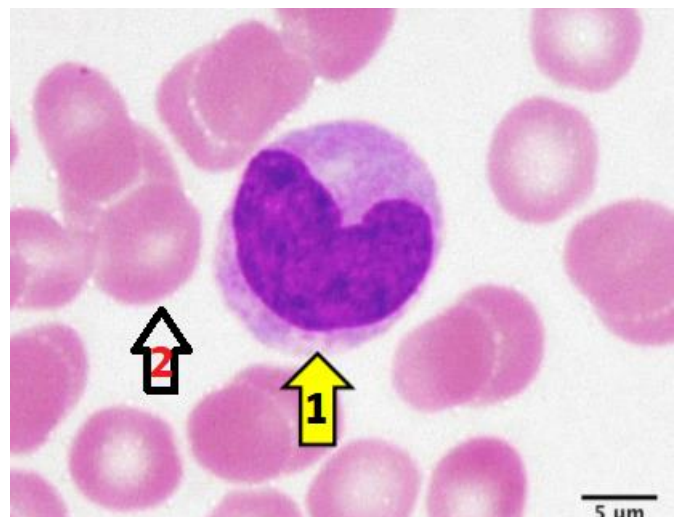
Answer: Lymphatic tonsil



Q6. 1 & 2 represent respectively:

Answer:

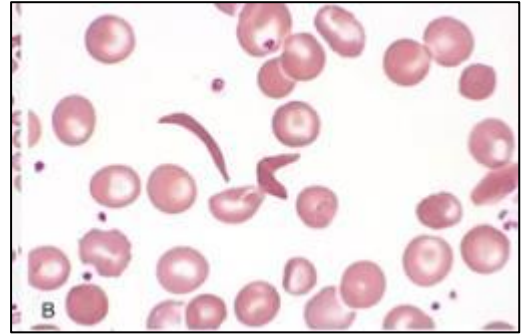
1 Monocyte, 2 erythrocyte



patho Lab:

Q1. True about this image:

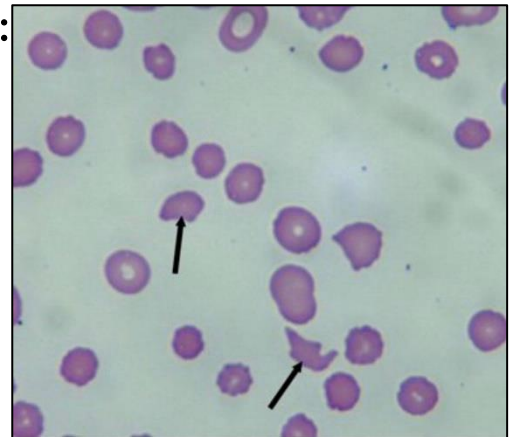
Answer: Absent HgA



Q2. Not related to the disease in the image:

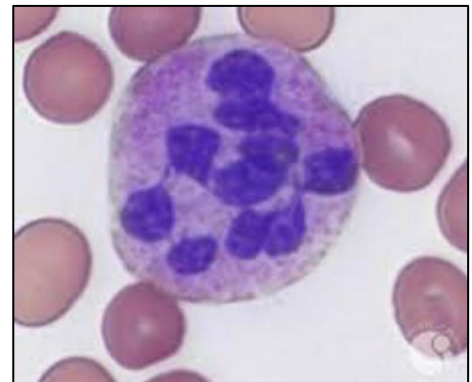
- A. Thrombocytopenia
- B. Reticulocytosis
- C. Could be caused by E-coli
- D. Deficiency in von-Willebrand type IIb
- E. severe trauma

Answer: D



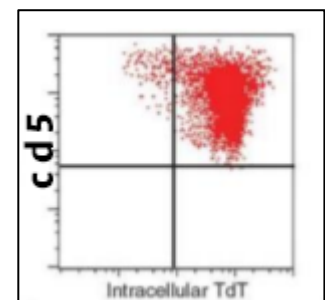
Q3. This morphology is associated with:

Answer: Neuropathy



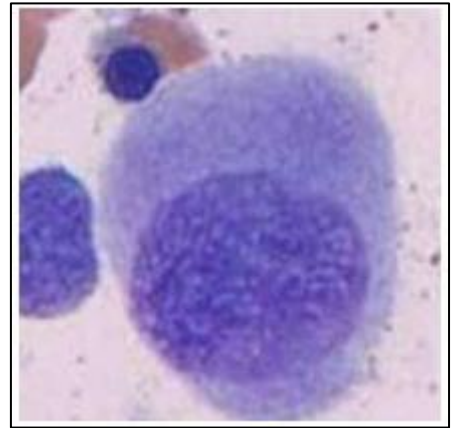
Q4. What type of cancer does this flow cytometry represent:

Answer: Notch1



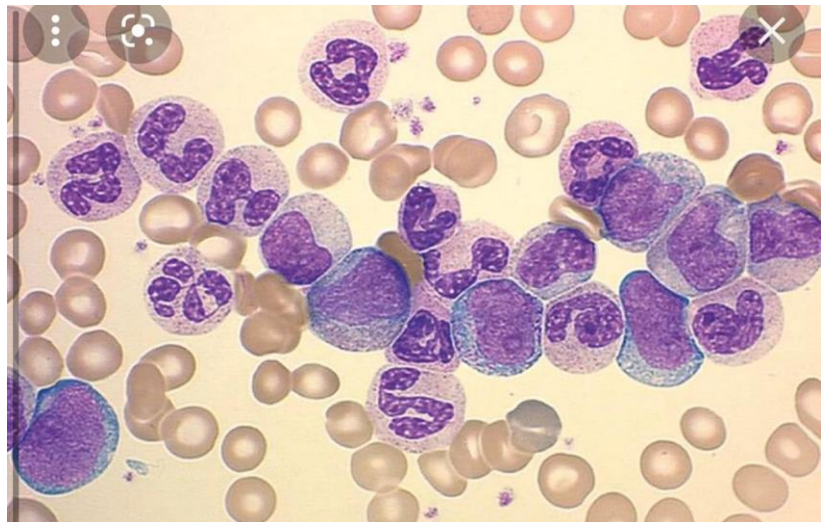
Q5. This cell morphology is associated with:

Answer: Monosomy 7



Q6. This image represents which translocation:

Answer: t(9:22)



THE END