TEST BANK

Doctor 2019

SUBJECT:

HLS past papers collected questions

Pathology -third week material

COLLECTED BY :

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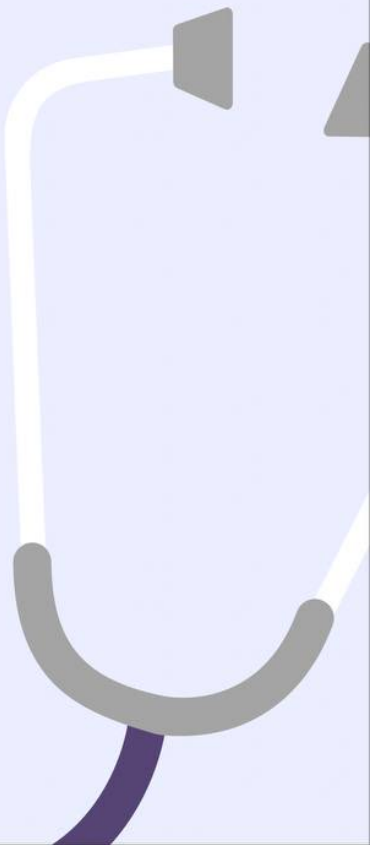

1-**Cd19+ with CD5 - , what is the tumor?**

a. Hodgkin lymphoma

b. Hairy cell leukemia

c. Plasma cell myeloma

answer: b

3-10 years old child with petechial hemorrhage, what is the disease?

a. Von-willebrand disease

b. Accidental Aspirin

c. Disseminated intravascular coagulation

d. Hemophilia

answer: a

4-A 55 year old patient with high WBC count and most of them are lymphocytes, he has monoclonal cells and CD5+, after weeks he comes back with anemia, what is your next step?

a. Bone marrow biopsy

b. Coombs test

c. he has Myelophthisic anemia

d. Osmotic Fragility test

e. hemoglobin Electrophoresis

answer: b

5-Christmas disease is deficiency of ?

a. Factor II

b. Factor IX

c. Factor X

d. Factor VIII

answer: b

6-Patient with Hemoglobin 19g/dl (very high) and she has Jak2 mutated gene and Low erythropoietin, on bone marrow biopsy we found that Blast count almost 40% of the cells, your diagnose ?

a. she has Bcl2 translocation

b. she has a rare complication of Myeloproliferative syndrome

c. Bone marrow would show fibrosis

d. Phlebotomy would alleviate the disease

answer: b

7-Neutrophil would have the same normal appearance in which of the following diseases?

a. bacterial infection

b. Chediak-Higashi

c. Leukocyte adhesion molecules deficiency

d. leukemoid reaction

answer: c

8-A 5 years old child presents with cervical lymph node enlargement, histology shows expansion of the paracortical areas with resulting atrophy of the follicles and The paracortical areas show the presence of immunoblasts with fine chromatin and prominent nucleoli, your diagnose?

a. bacterial infection

b. burkitt lymphoma

c. Vaccine

d. follicular lymphoma

e. Allergy reaction

answer: c

12-A 22-year-old male with back pain and superior mesenteric artery thrombus, on the blood film, he has normal platelet count and function, also coagulation factors test shows normal function, what is your diagnose?

a. hemophilia A

b. Acute promyelocytic leukemia

c. Thrombocytopenia

d. Paroxysmal nocturnal hemoglobinuria

answer: d

13- breast cancer, she had radiotherapy and after weeks she comes with anemia and pancytopenia, her blood film show needle like structures inside the WBCs, choose the right statement

a. The leukemic cells are lymphoid in origin

b. she had good prognosis

c. Ring structure in RBCs is common characteristic in her case

d. she has increased risk of infection

e. Folate levels are low

answer: d

15-What is the genetic translocation in promyelocytic leukemia

a. T(8:21) RUNX

b. T(15:17) PML-RARA

c. T(9:22)

answer: b

17-Description of Hodgkin

• Reactive cells are more than monoclonal cells

18-82 year old with pancytopenia, blasts are less than 1% , neutrophils are hyposegmented and megakaryocyte are small, choose the right statement:

a. patient must have chemotherapy

b. the disease causes bone lytic leasions

c. T(12:21) is common here

d. increased risk of transformation to AML

answer: d

19-True about Bence Jones proteins

a. Heavy chains found in blood

b. free light chains found in blood

c. free light chains found in urine

d. heavy chains found in urine

answer: c

1-All of the following represents correct examples of targeted therapy in hematolymphoid neoplasms EXCEPT:

a. Daclizumab (anti CD25)- Sezary syndrome

b. Imatinib (anti bcr/abl) - CML

c. ATRA - acute promyelocytic leukemia

d. Enasidenib (anti IDH) - AML

e. Vemurafenib (anti BRAF)- hairy cell leukemia

5-Patients with Hand Shuller Christian disease have all of the following EXCEPT:

a. Skull bony lesions

b. Exophthalmous

c. CDla expression

d. Diabetes insipidus

e. Pulmonary nodules

10-Flow cytometry study is NOT useful in diagnosis of:

a. Glanzmann thrombasthenia

b. Acute myeloid leukemia

c. Langerhans cell histiocytosis

d. B-acute llymphoblastic leukemia

e. Paroxysmal nocturnal hemoglobinurea

12-Which of the following favors the diagnosis of classic Hodgkin lymphoma?

a. Contiguous pattern of spread

b. Extranodal disease

c. Expression of CD20

d. Presence of popcorn cells

e. Negative role of EBV in pathogenesis

14-Which of the following combinations is WRONG?

a. Defective SLAM protein - infant onset HLH

b. t(11;14) cyclinD1-IgH - mantle cell lymphoma

c. (11;14) cyclinDI-IgH - plasma cell myeloma

d. Bcr-abl mutation - chronic myeloid leukemia

e. PDLI expression - Hodgkin lymphoma

15-Neutropenia developed in a patient who recently undergone cancer chemotherapy. Which of the following agents would accelerate recovery of the neutrophil count:

a. Vitamin B12

b. Leukovorin

c. rHuG.CSF (Filgrastim)

d. Interleukin-11

e. Prednisone

16-A slowly developing (chronic) disease, West African Sleeping Sickness is caused by:

a. Trypanosoma brucei gambiense

b. Trypanosoma equiperdum c. Trypanosoma brucei rhodesiense

d. Trypanosoma congolense

e. Trypanosoma cruzi

19-One of the following lymphomas does NOT have an association with oncogenic microorganisms:

a. Follicular lymphoma

b. Adult T-cell leukemia/lymphoma

c. Burkitt lymphoma

d. Hodgkin lymphoma

e. Extranodal marginal zone lymphoma

24-Which of the following combinations is CORRECT?

a. Spoon-shaped nails → vitamin B12 deficiency

b. Positive Coombs test → immune thrombocytopenic purpura

c. Supravital stain → Howell Jolly bodies

d. Mixing study hemophilia testing

e. Parvovirus infection → pancytopenia

26-CD42b is absent in:

a. Heparin-induced thrombocytopenia

b. Paroxysmal nocturnal hemoglobinurea

c. Immune thrombocytopenic purpura d. Glanzmann thrombasthenia

e. Bernard Soulier syndrome.

33-Which of the following is a CORRECT combination for the pathogenesis of diseases?

a. (JAK-STAT) pathway - CML

b. Warburg metabolism - SLL

c. (TGF-B) - primary myelofibrosis

d. (RANKL) – B-ALL

e. (IL-11) – Hodgkin lymphoma

36-The following features are common in plasma cell myeloma EXCEPT:

a. Presence of tingible body macrophages

b. Early onset anemia

c. Bence-Jones protein

d. Osteolytic lesions

e. Serum and urine M-protein

37-A patient was found to have mild anemia and abundant schistocytes. All of the following tests are important to explain the cause of schistocytes EXCEPT:

a. History of violent exercise

b. History of food poisoning

c. Abnormal PT and PTT tests

d. High level of ADAMTS13

e. Presence of thrombocytopenia

43-Which of the following combinations is CORRECT?

a. Eosinophilia - chronic rheumatologic diseases

b. Paracrotical hyperplasia - benign B-cell proliferation

c. Neutrophilia - myelodysplastic syndrome

d. Basophilia - polycythemia vera

e. Leukemoid reaction- good response to imatinib

44-Richter transformation occurs in patients with:

a. Peripheral T-cell lymphoma

b. Small lymphocytic lymphoma

c. Follicular lymphoma

d. Burkitt lymphoma

e. Hodgkin lymphoma.

46-You participated in a research to make a test that detects free hemoglobin in urine. Your supervisor explained the importance of this test as to differentiate hemolytic anemia

from bleeding in urine that commonly occurs in patients with genitourinary diseases (intact RBCS). The best candidates for your test would be patients with:

a. G6PD deficiency

b. Hemophilia A, severe form

c. Hereditary spherocytosis

d. Immune hemolytic anemia

e. Thalassemia.

5) A 4-year-old boy presents with recurrent joint pain involving the knees and hips. He had always bruised easily, and recently the parents had seen blood in his urine. A presumptive diagnosis of classic hemophilia (hemophilia A) is made, and coagulation blood tests are performed. Which of the following is the most likely set of findings of coagulation screening tests?
(A) Normal bleeding time, platelet count, and thrombin time; prolonged PT and APTT.
(B) Normal bleeding time, platelet count, thrombin time, and APTT; prolonged PT.
(C) Normal bleeding time, platelet count, thrombin time, and PT; prolonged PTT.
(D) Normal platelet count and thrombin time; prolonged bleeding time, PT, and APTT. (E) Prolonged bleeding time, PT, APTT, and thrombin time; decreased platelet count.

6) A 35-year-old woman presents with fever, fatigue, mucocutaneous bleeding, and changing neurologic signs. Laboratory examination reveals thrombocytopenia, anemia, and reticulocytosis, as well as increased concentrations of creatinine and urea nitrogen. Examination of a peripheral blood smear reveals many fragmented circulating red cells (helmet cells and schistocytes). The most likely diagnosis is:

(A) Bernard-Soulier disease. (B) DIC.
(C) ITP.
(D) TTP.
(E) von Willebrand disease.

7) A 25-year-old man has a lifelong hemorrhagic diathesis. The PT and bleeding time are normal, but the PTT is prolonged. The most likely cause of the bleeding disorder is:

(A) a platelet functional disorder.
(B) factor VII deficiency.
(C) factor VIII deficiency.
(D) factor IX deficiency.
(E) von Willebrand disease.

8) A 50-year-old man has been in the medical intensive care unit for septic shock for the past few days. He has now developed rectal bleeding, epistaxis, and gingival bleeding. DIC is suspected. Which of the following sets of results for a panel of screening tests is most consistent with this diagnosis?

(A) Normal bleeding time, PT, APTT, thrombin time, and platelet count.
(B) Prolonged bleeding time, PT, APTT, and thrombin time; reduced platelet count.
(C) Prolonged PT and APTT; normal bleeding time, platelet count, and thrombin time.
(D) Prolonged PT and APTT; reduced platelet count; normal bleeding time and thrombin time.
(E) Prolonged bleeding time, PT, and APTT; normal platelet count and thrombin time.

9) A 14-year-old girl presents with prolonged bleeding from wounds and minor trauma and severe menorrhagia. Family history reveals that her father also has prolonged

bleeding from wounds and minor trauma, as does her brother. Which of the following is the most likely mechanism of this patient's disorder?

(A) Absence of platelet glycoprotein IIb-IIIa.
(B) Antiplatelet antibodies reacting with platelet surface glycoproteins.
(C) Deficiency of factor VIII.
(D) Deficiency of factor IX.
(E) Deficiency of vWF.

10) A 60-year-old chronic alcoholic with known alcoholic cirrhosis presents with upper gastrointestinal hemorrhage. Despite prolonged tamponade, bleeding is persistent. A coagulation defect related to the liver disease is suspected. Which of the following abnormalities is most consistent with this possibility?

(A) Deficiency of all clotting factors except for vWF.
(B) Deficiency of factors II, VII, IX, and X.
(C) Deficiency of factors II, V, VII, and X.
(D) Deficiency of factors IX, X, XI, and XII.
(E) Deficiency of vWF 8.

11) A 55-year-old woman with chronic pancreatitis undergoes coagulation screening tests before surgery. The PT and PTT are found to be prolonged. Given the following choices, which of the following is the most likely reason for the abnormal coagulation test results?

(A) Congenital inherited bleeding disorder.
(B) Fat malabsorption and vitamin K deficiency.
(C) Glutamate deficiency due to impaired digestion of dietary protein. (D) Nutritional vitamin C deficiency.

(E) Post-pancreatitic carcinoma of the pancreas.

12) An 80-year-old woman presents with recent onset of primary hemostatic (mucocutaneous) bleeding. Questioning reveals that she has been maintaining a "tea and toast" diet for the past 4 months. Her gums are hemorrhagic and spongy in consistency, and gingival bleeding is evident. Perifollicular hyperkeratotic papules, each surrounded by a hemorrhagic halo, are scattered over the lower extremities, and each papule surrounds

a twisted, corkscrew-like hair. A nutritional deficiency is suspected. Deficiency of which of the following nutrients is most likely related to the findings in this patient?
(A) Vitamin A.
(B) Vitamin B12.
(C) Vitamin C.
(D) Vitamin K. (E) Protein 10.

Questions 14 and 15 refer to the following scenario: A female patient presents to the emergency room with a chief complaint of dark patches on her tongue; multiple small, red dot-like structures on her skin; and a large, bluish bruise developing after she bumped into the back of a wooden chair.

14) What should the physician suspect? (A) Hemophilia.
(B) Epstein-Barr viral infection.
(C) Thrombocytopenia.
(D) Allergic response.
(E) Iron deficiency anemia.

15) What is one of the first tests that the doctor should order?
(A) Genetic analysis.
(B) IgE serum levels.
(C) Computed axial tomography scan.
(D) Magnetic resonance imaging.
(E) Complete blood count.

Questions 16 and 17 refer to the following scenario: A female patient with a bleeding disorder has exceptionally large platelets.

16) What is her disease?
(Al Bernard-Soulier syndrome.
(Bl Glanzmann thrombasthenia. (Cl von Willebrand disease.
(Dl Hemophilia A.

(El Thrombopenia.

17) What defect causes her disease?
(A) Inability to bind to von Wille brand factor.
(B) Inability to bind to fibrinogen.
(C) Increased von Willebrand factor levels. (D) Decreased factor VIII levels.
(E) Decreased platelet levels.

18) All of the following are classifications of dietary deficiencies causing nutritional anemia except:
A. Vitamin B12 (cyanocobalamin).
B. Folic acid.
C. Vitamin D.
D. Iron.

Pathology Questions

1) A 25-year-old woman has a 3-year history of arthralgias. Physical examination shows no joint deformity, but she appears pale. Laboratory studies show total RBC count of 4.7 million/mm3, hemoglobin of 12.5 g/dL, hematocrit of 37.1%, platelet count of 217,000/mm , and WBC count of 5890/mm .The peripheral blood smear shows hypochromic and microcytic RBCs. Total serum iron and ferritin levels are normal. Hemoglobin electrophoresis shows an elevated hemoglobin A 2 level of about 5.8%. What is the most likely diagnosis?

(A) Autoimmune hemolytic anemia
(B) β-Thalassemia minor
(C) Infection with Plasmodium vivax
(D) Anemia of chronic disease
(E) Iron deficiency anemia

2) A 30-year-old woman has had a constant feeling of lethargy since childhood. On physical examination,she is afebrile and has a pulse of 80/min,respirations of 15/min,and blood pressure of 110/70 mm Hg. The spleen tip is palpable, but there is no abdominal pain or tenderness. Laboratory studies show hemoglobin of 11.7 g/dL, platelet count of 159,000/mm3, and WBC count of 5390/mm3. The peripheral blood smear shows spherocytosis. The circulating RBCs show an increased osmotic fragility. An inherited abnormality in which of the following RBC components best accounts for these findings?

(A) Glucose-6-phosphate dehydrogenase
(B) Membrane cytoskeletal protein
(C) α-Globin chain
(D) Heme
(E) β-Globin chain

3) A 30-year-old woman reports becoming increasingly tired for the past 5 months. On physical examination, she is afebrile and has mild splenomegaly. Laboratory studies show a hemoglobin concentration of 11.8 g/dL and hematocrit of 35.1%. The peripheral blood smear shows spherocytes and rare nucleated RBCs. Direct and indirect Coombs test results are positive at 37°C, although not at 4°C. Which of the following underlying diseases is most likely to be diagnosed in this patient?

(A) Infectious mononucleosis
(B) Mycoplasma pneumoniae infection
(C) Hereditary spherocytosis

(D) Escherichia coli septicemia
(E) Systemic lupus erythematosus

4) Three days after taking an anti-inflammatory medication that includes phenacetin, a 23-year-old African-American man passes dark reddish brown urine. He is surprised by this because he has been healthy all his life and has had no major illnesses. On physical examination, he is afebrile, and there are no remarkable findings. CBC shows a mild normocytic anemia, but the peripheral blood smear shows precipitates of denatured globin (Heinz bodies) with supravital staining and scattered "bite cells" in the population of RBCs. Which of the following is the most likely diagnosis?

(A) α-Thalassemia
(B) Sickle cell trait
(C) Glucose-6-phosphate dehydrogenase deficiency
(D) Autoimmune hemolytic anemia
(E) β-Thalassemia minor

5) A 39-year-old woman sees her physician because she has experienced abdominal pain and intermittent low-volume diarrhea for the past 3 months. On physical examination, she is afebrile. A stool sample is positive for occult blood. A colonoscopy is performed, and biopsy specimens from the terminal ileum and colon show microscopic findings consistent with Crohn's disease. Because she has failed to respond to medical therapy, surgery is warranted, and part of the colon and terminal ileum are removed. She is transfused with 2 U of packed RBCs during surgery. Several weeks later, she appears healthy, but complains of easy fatigability. On investigation, CBC findings show hemoglobin of 10.6 g/dL, hematocrit of 31.6%, RBC count of 2.69 million/µL, MCV of 118 µm3, platelet count of 378,000/mm3, and WBC count of 9800/mm3. The reticulocyte count is 0.3%. Which of the following is most likely to produce these findings?

(A) Hemolytic anemia
(B) Aplastic anemia
(C) Chronic blood loss
(D) Vitamin B12 deficiency
(E) Anemia of chronic disease

6) A 32-year-old woman from Saigon, Vietnam, gives birth at 34 weeks' gestation to a markedly hydropic stillborn male infant. Autopsy findings include hepatosplenomegaly and cardiomegaly, serous effusions in all body cavities, and generalized hydrops. No congenital anomalies are noted. There is marked extramedullary hematopoiesis in visceral organs. Which of the following findings is most likely to be present on hemoglobin electrophoresis of the fetal RBCs?

(A) Hemoglobin A1
(B) Hemoglobin A2
(C) Hemoglobin Bart's
(D) Hemoglobin C
(E) Hemoglobin E
(F) Hemoglobin F

7) A 55-year-old, otherwise healthy man has experienced minor fatigue on exertion for the past 9 months. He has no significant previous medical or surgical history. On physical examination, there are no remarkable findings. Laboratory studies show hemoglobin of 11.7 g/dL, hematocrit of 34.8%, MCV of 73 µm3, platelet count of 315,000/mm3, and WBC count of 8035/mm3. Which of the following is the most sensitive and cost-effective test that the physician should order to help to determine the cause of these findings?

(A) Serum iron
(B) Serum transferrin
(C) Serum haptoglobin
(D) Bone marrow biopsy
(E) Serum ferritin

1	B
2	B
3	E
4	C
5	D
6	C
7	E