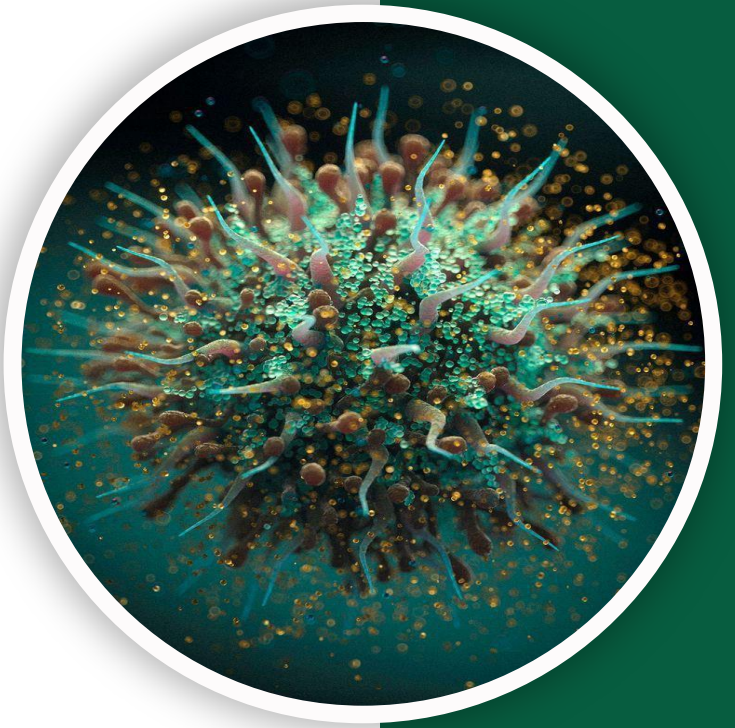
بسم الله الرحمٰن الرحيم

(وَفَوْقَ كُلِّ ذِي عِلْمٍ عَلِيمٌ)

Pathology | Final

Past Papers



Written by : DST

Reviewed by : NST

POLYCYTHEMIA

Q1:One of the following is incorrect about polycythemia vera :

A) JAK2 mutation

B) Reversible polycythemia

C) Splenomegaly

D) Aquagenic pruritus

E) Leukocytosis

Ans: B

Q2 : Absolute polycythemia can be caused by:

A) Diarrhea

B) Diuretic drugs

C) Vomiting

D) Carcinoma in renal

Ans: D

Q3 : All of the following is true about polycythemia Vera except ：

A) Splenomegaly is common

B) basophilia

C) High altitude

D) Chronic disease

Ans: C

ANEMIA OF BLOOD LOSS

Q1:All the following are symptoms of anemia except:

A) Redness of the skin

B) Tachycardia

C) Headache

D) Fatigue

E) Red urine

Ans: A

Q2:Which of the following doesn’t appear when acute blood occurs

A) Reticulocytopenia

B) Early hypotension

C) High erythropoietin

Ans: A

Q3 : A 62-year-old male, presented with microcytic hypochromic anemia, which of the following is the most common cause of the condition

A) GI bleeding

B) Malabsorption

C) Acute trauma Normocytic

D) CKD Normocytic

Ans: A

طعنه في صدره=Acute blood loss

Q 4:A guy with Chest Stab came to the hospital, his lab findings regarding his RBCs are

A) Normocytic , normochromic

B) Macrocytic, normochromic

C) Microcytic, normochromic

D) Microcytic, hypochromic

Ans: A

Q4 : A patient has hemorrhage, he loses 1.5 L of blood, when his blood is tested

A) Normocytic, normochromic

B) Macrocytic, normochromic

C) Microcytic, normochromic

D) Microcytic, hypochromic

Ans: A

Q5 : Reticulocyte count is used to differentiate between

A) Microcytic and macrocytic

B) Hemolysis anemia and normocytic anemia

C) Anemia of hemorrhage and anemia Of bone marrow failure

D) Iron deficiency anemia and thalassemia

Ans: C

Q6 :A 14-year-old girl who has a traumatic accident, and she was hospitalized. Her hematocrit level was low even after blood transfusion, which of the following will appear after 7 days

A) Leukocytosis

B) Decrease EPO

C) Reticulocytosis

D) Anisocytosis

Ans: C

ANEMIA OF LOW PRODUCTION
&
HEMOLYTIC ANEMIA

Q1. Which of the following are NOT characteristic of iron deficiency anemia?

A) Low reticulocyte hemoglobin content

B) Low mean cell volume

C) Absent Perl's staining pattern

D) Low total iron binding capacity

E) Can be caused by liver disease

Ans: D

Q2 : Which of the following causes pancytopenia:

A) Immune hemolytic anemia

B) Thalassemia

C) Iron deficiency anemia

D) Hereditary spherocytosis

E) B12 deficiency

Ans: E

Q3: Which one of the following is NOT a cause of vitamin B12 deficiency?

A) Jejunal resection.

B) Gastrectomy

C) Malabsorption.

D) Veganism.

E) Lack of gastric intrinsic factor

Ans: A

Q4. Not a definite effect of vitamin b12 deficiency?

A) Pernicious anemia

B) Megaloblastic anemia

C) Sterility

D) Neuropathy

E) Macrocytic hypochromic

Ans: E
macrocytic and normochromic

Q5:What happens in patients with IDA?

A) Platelets ↑ + TIBC ↑

B) Platelets ↓ + TIBC ↓

C) Platelets ↑ + TIBC ↓

Ans: A

Total iron binding capacity increases because transferrin increase to maximize iron transport

Q6. Which of the following is NOT characteristic of megaloblastic anemia?

A. Macroovalocytes
B. Chronic course of disease
C. Can be caused by strict vegan diet
D. Loss of proprioception
E. Severely high bilirubin level

Ans: E

Q7. A patient present with headache, dizziness, and nail spooning, what is your next step?

A) Iron studies

B) Hepcidin level

C) Electrophoresis

D) Bone marrow biopsy

Ans: A

Q8. Which of the following is NOT an expected finding in a patient with iron deficiency anemia

A) Koilonychia (spoon nails)

B) Angular stomatitis

C) Hypochromic microcytic red blood cells

D) Pallor

E) Symmetric paresthesia in lower limbs.

Ans: E ; seen in b12 deficiency NOT IDA

Q9. Recent research showed that patients with marked obesity have increased levels of IL-6 in blood that is mainly secreted from adipose tissue which results in anemia. Which of the following is an expected finding?

A) Absent haptoglobin level

B) High erythropoietin level

C) High reticulocyte count

D) Low total iron binding capacity

E) The presence of gall bladder stones.

Ans: D

Q10. Which of the following is MOST likely to be required by a A five-year-old boy with CKD (chronic kidney disease) ?

A) Oprelvekin (IL-11)

B) Cyanocobalamin

C) Erythropoietin

D) Deferoxamine

E) Filgrastim (G-cSF).



Ans: C

Q11. Chronic alcoholism is a risk factor for:

A) Megaloblastic anemia

B) Iron deficiency anemia

C) Aplastic anemia

D) Immune hemolytic anemia

E) Myelodysplastic syndrome

Ans: A

Q12. Which of the following is wrong about hepcidin?

A) It is increased in iron overload.

B) It decreases with inflammation.

C) It decreases iron absorption.

Ans: B

Q13. Chronic disease anemia (anemia of chronic inflammation) is caused primarily by elevated levels of:

A) Hepcidin

B) Iron

C) Transferrin

D) Erythropoietin

E) Ferritin

Ans: A

Q14 . Which of the following can't be seen in a patient of pure red cell aplasia :

A) Skin rash and Arthralgia

B) Normocytic anemia.

C) Reticulocytopenia

Ans: A

Q15. Chronic alcoholism is a risk factor for:

A. Megaloblastic anemia

B. Iron deficiency anemia

C. Aplastic anemia

D. Immune hemolytic anemia

Ans: A

Q16. which of the following is true about Folic acid deficiency:

A. Acute blood loss

B. Chronic blood loss

C. Chronic hemolysis

D. Chronic-inflammation

Ans: C

Q17. G6PD Mediterranean is characterized by:

A) Reduced stability of the enzyme.

B) Reduced expression, stability, and activity of the enzyme.

C) Reduced activity of the enzyme.

D) Reduced expression of the enzyme.

E) Reduced stability and activity of the enzyme.

Ans: C

Q18. G6PD deficiency class 2 (Mediterranean) produce enzyme with:

A) More activity

B) Less stability

C) Less activity

D) B+C

Ans: C

Q19. Which of the following is wrong about G6PD deficiency?

A) GSH is normally maintained in the reduced form by Glutathione reductase.

B) G6PD gene is located on the X chromosome.

C) G6PD deficiency is mainly caused by large deletions.

Ans: C

Q20 . Wrong about PNH:

A) Thrombosis is common.

B) Splenomegaly

C) Mutation in PIGA gene.

D) CD55 and CD59 are deficient

Ans: B ; intravascular hemolytic anemia

Q21. Which of the following pairs is correctly associated with the presence of spherocytes?

A) Methyldopa – Spherocytosis AIHA

B) Iron deficiency anemia – Spherocytosis

C) Thalassemia – Spherocytosis

D) Sickle cell anemia – Spherocytosis

E) Megaloblastic anemia – Spherocytosis

Ans: A

Q22. All of the following describe Anemia associated with lymphoma except:

A. increase in IgM

B. Treatment with methotroxate

C. Aplastic crisis

D. megaloplastic anemia

Ans: C

Q23. Which of the following disease can be treated by splenectomy :

A. hereditary sphereocytosis

B. sickle cell

C. PNH

D. Aplastic anemia

Ans: A

Q24.All of the following have a large macrocytic RBCs except:

A. Hypothyroidism

B. Myelodysplastic syndrome

C. Treatment by Alpha methyl dopa

D. Alcoholism

Ans: C

Q25 . in which of the following disease does folate deficiency occur:

A. iron deficiency

B. acute hemorrhage

C. chronic GI bleeding

D. Chronic hemolytic anemia

Ans: D

Q26. One of the following is caused by direct trauma to RBCs:

A) Schistosytes

B) Echinocytes

C) Spherocytes

D) Elliptocytes

E) Stomatocytes

Ans: A

Q27. One of the following is wrong about aplastic anemia:

A) Splenomegaly

B) Macrocytic anemia

C) Due to drug exposure

D) Absence of hematopoietic stem cells in BM

E) Pancytopenia in peripheral blood

Ans: A

Q28. One of the following causes macrocytic anemia:

A) Methotrexate therapy

B) Chronic inflammation

C) IDA

D) Presence of schistocytes

Ans: A

Q29 . Which of the following doesn’t appear when acute blood loss occurs?

A) Reticulocytopenia

B) early hypotension

C) High erythropoietin

Ans: A

HEMOGLOBINOPATHIES

Q1:Hb Bart means that you have:

A) 4 chains of gamma

B) 4 chains of beta

C) 3 chains of beta and 1 chain of alpha

Ans: A

Q2:Which of the following can’t be present in beta thalassemia:

A) HbH

B) HbA

C) HbF

Ans: A

Q3:HbH is caused by :

A) Deletion of 3 genes

B) Deletion of 4 genes

C) Point mutation in 3 genes

D) Point mutation in 4 genes

Ans: A

Q4:Hb Bart is caused by :

A) Deletion of 3 genes

B) Deletion of 4 genes

C) Point mutation in 3 genes

D) Point mutation in 4 genes

Ans: B

Q5:Doesn’t worsen sickle cell trait :

A) Malarial infection

B) Hypoxia

C) Dehydration

D) Acidosis

Ans: A

Q6. Isolated HbF is found in:

A) HbH

B) Beta thalassemia minor

C) Cooley’s anemia

D) Alpha thalassemia with HbS

E) Hydrops fetalis



Ans: C

Q7 . One of the following is a mismatch:

a) Alpha thalassemia minor- high HgA2

b) Sickle cell trait- no anemia

c) Beta thalassemia major- heart failure

Ans: A

ACUTE LEUKEMIA & HISTIOCYTIC NEOPLASMS

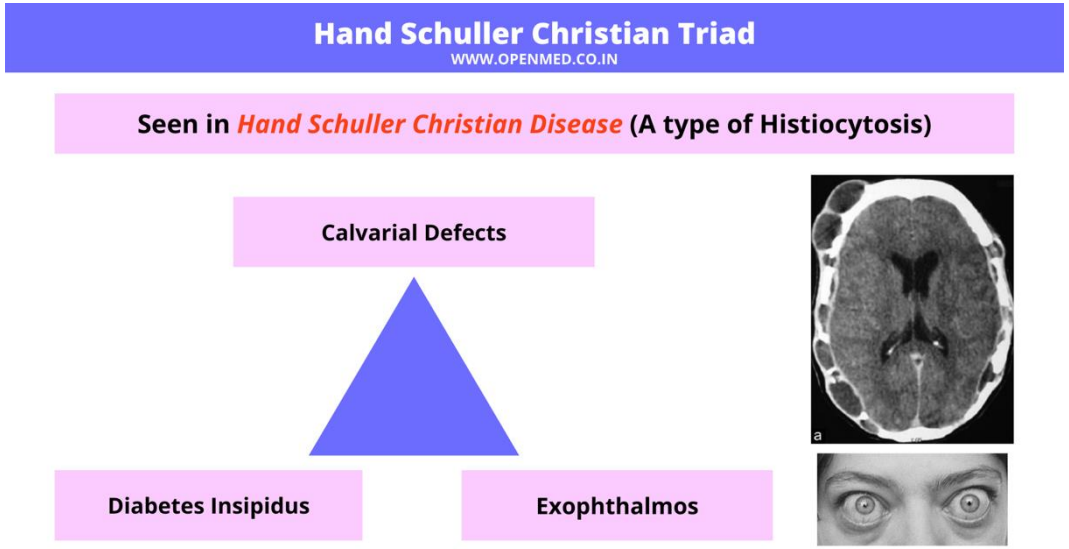
Q1:-year-old with pancytopenia, blasts are less than 1%, neutrophils are hypo-segmented and megakaryocyte are small, choose the right statement:

A) Patient must have chemotherapy
B) The disease causes bone lytic lesions
C) T(12:21) is common here
D) increased risk of transformation to AML

Ans: D

Q2 : Patients with Hand–Schüller–Christian disease have all of the following EXCEPT:

A) Skull bony lesions
B) Exophthalmos
C) CD1a expression
D) Diabetes insipidus
E) Pulmonary nodules



Ans: E

Q3 : t(15,17) is associated with all of the following except:

A) Splenomegaly
B) Cleaved nuclei
C) Needle-shaped structures
D) Promyelocytes
E) Treated with all-trans retinoic acid

Ans: A

Q4 : What is the genetic translocation in promyelocytic leukemia?

A) T(8:21) RUNX
B) T(15:17) PML-RARA
C) T(9:22)

Ans: B

Q5 : Flow cytometry study is NOT useful in diagnosis of?

A) Acute myeloid leukemia
B) Langerhans cell histiocytosis
C) B-acute lymphoblastic leukemia

Ans: B

Q6. Which of the following isn’t true about AML:

A) IDH mutation
B) Good prognosis, respond to chemotherapy
C) Absence of Birbeck granules
D) MPO test positive

Ans: B

Q8. Which of the following is associated with CD1a

A) Langerhans cell histiocytosis
B) Multiple myeloma
C) Chronic lymphocytic leukemia
D) Hodgkin lymphoma
E) Acute myeloid leukemia

Ans: A

Q7. Which of the following can be associated with IDH mutations

A) Acute myeloid leukemia
B) Marginal cancer of the spleen

Ans: A

BLEEDING DISORDERS

Q1. 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.

Ans: C

Q2. 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 disorderX

B) Factor VII deficiency.

C) Factor VIII deficiency.

D) Von willebrand disease

Ans: C

Q3. 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.

Ans: E

Q4. Christmas(hemophilia B) disease is deficiency of?

A) Factor II
B) Factor IX
C) Factor X
D) Factor VII

Ans: B

Q5 .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 (schistocytes). The most likely diagnosis is:

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

Ans: D

Q6. A patient was found to have mild anemia and abundant schistocytes. All ofthe 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



Ans: D

Q7. 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.

Ans: B

Q8. 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

Ans: B

Q9.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!What should the physician suspect?

A) Hemophilia.
B) Epstein-Barr viral infection.
C) Thrombocytopenia.
D) Allergic response.
E) Iron deficiency anemia.

Ans: C

Q10. DIC caused by extensive endothelial damage by:

A) Pancreatic adenocarcinoma
B) Difficult labor
C) Brain trauma
D) Heat stroke

Ans: D

Q11. 9years old child with petechial hemorrhage, what is the disease:

A) Von-willebrand disease
B) Accidental Aspirin
C) Disseminated intravascular coagulation
D) Hemophilia

Ans: A

Q12. One of the following conditions has a deficiency in ADAMTS13:

A) Disseminated intravascular coagulation

B) Thrombotic thrombocytopenic purpura

C) Hemolytic uremic syndrome

D) Immune thrombocytopenic purpura

E) Christmas disease

Ans: B

Q13. What is the mode of transmission in vWF disease

A) Autosomal dominant

B) Autosomal recessive

C) X-licked dominant

D) X-linked recessiv

Ans: A

BENIGN WBCS DISEASES

Q1:Which of the following is associated with Hemophagocytic Lymphohistiocytosis:

A) Acute lymphocytic leukemia

B) Chronic lymphocytic leukemia

C) T cell lymphoma

Ans: C

Q2:One of the following can cause paracortical hyperplasia:

A) Rheumatologic disease

B) HIV infection

C) Toxoplasmosis

D) Post vaccination

E) Lymph nodes that are adjacent to cancer

Ans: D

Q3:Which of the following can cause eosinophilia :

A) Bacterial infection

B) Viral infection

C) Fungal infection

D) Helminthis infection

E) Tuberculosis

Ans: D

Q4:Which of the following isn’t associated with proliferation of T-lymphocytes :

A) Viral infections ‘EBV’

B) Post-vaccination

C) Rheumatologic Disease

D) Drug reactions

Ans: C

Q5:Which of the following isn’t associated with Hemophagocytic Lymphohistiocytosis:

A) Autoimmune diseases

B) Neutrophilia

C) Defects in gene PRF1

D) Increase in ferritin level

Ans: B

Q6:We call it severe Neutropenia when neutrophils count is lower than:

A) 500/mm3

B) 1500/mm3

C) 250/mm3

Ans: A

Q7:A 5-year-old child presents with cervical lymph node enlargement, histology shows expansion of paracortical areas with resulting atrophy of the paracortical area shows the presence of immunoblasts with fine chromatin and prominent nucleoli, your diagnosis?

A) Bacterial infection

B) Burkitt lymphoma

C) Vaccine

D) Follicular lymphoma

E) Allergic Reaction

Ans: C

Q8:Which of the following can cause reactive lymphadenopathy + granuloma?

A) Cat-scratch disease

B) Acute non-specific lymphadenitis

C) Chronic non-specific lymphadenitis

D) Hemophagocytic Lymphohistocytosis

Ans: A

Q9:What is decreased in Hemophagocytic Lymphohistiocytosis:

A) Perforins

B) T-cells

C) Cytokines

Ans: A

LYMPHATIC NEOPLASMS

Q1:Which of the following is NOT related to Hodgkin lymphoma:

A) It is common in children

B) Can be associated with EBV

C) It is characterized by low number of malignant cells

D) Cells has similar morphology to normal lymphocytes

E) Disease course can be predicted

Ans: D

Q2:The most Hodgkin lymphoma associated with EBV:

A) Lymphocyte rich

B) Mixed cellularity

C) Nodular sclerosis

D) Lymphocyte depleted



Ans: B

Q3:Which of the following combinations is WRONG?

A) Defective SLAM protein - infant onset HLH

B) t(11;14) cyclin D1-IgH – mantle cell lymphoma

C) (11;14) cyclin D1-IgH – plasma cell myeloma

D) BCR-ABL mutation – chronic myeloid leukemia

E) PDLI expression – Hodgkin lymphoma

Ans: A

Q4:Which of the following favors the diagnosis of Hodgkin lymphoma ?

A) Contiguous pattern of spread

B) Extra-nodal disease

C) Expression of CD20

D) Presence of popcorn cells

E) Negative role if EBV in pathogenesis

Ans: A

Q5:Mismatch:

A) Thymus – Tax

B) SLL – BCR

C) Burkitt – c-MYC

Ans: A

Q6:BCl2 positive has nothing to do with :

A) Burkitt lymphoma

B) DLBCL

C) Follicualr lymphoma

D) SLL/CLL

Ans: A

Q7:CD+19 with +CD5, what is the tumor?

A) Hodgkin lymphoma

B) CLL/SLL

C) Plasma cell myeloma

Ans: B

Q8:True about Bence Jones proteins:

A) Heavy chains found in blood

B) Free light chain found in blood

C) Free light chains found in urine

D) Heavy chains found in urine

Ans: C

Q9:The following features are common in plasma cell myeloma, EXCEPT:

A) Presence of tangible body macrophages

B) Early onset anemia

C) Bence Jones proteins

D) Osteolytic lesions

E) Serum and urine M-protein

Ans: A

Q10:Description of Hodgkin:

A) Reactive cells are more than monoclonal cells

B) Involves multiple sites

C) Extra-nodal involvement is common

Ans: A

Q11: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) Extra-nodal marginal zone lymphoma

Ans: A

Q12:Low grade neoplasm:

A) Mycosis fungoids

B) DLBC Lymphoma

C) Primary myelofibrosis

Ans: A

Q13:Richter transformation occurs in patients with:

A) Peripheral T-cell lymphoma

B) Small lymphocytic lymphoma

C) Follicular lymphoma

D) Burkitt lymphoma

E) Hodgkin lymphoma

Ans: B

Q14:Mantle cell lymphoma:

A) Extra-nodal

B) Common in young patients

C) Centrocytes are focal

Ans: A

Q15: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) Enasidenic (anti IDH)

E) Vemurafenib (anti BRAF) – hairy cell leukemia

Ans: A

MPN & MDS

Q1:Which of the following is not associated with Essential thrombocythemia:

A) Bone fibrosis presence

B) Thrombocytosis

C) Thrombosis

D) JAK2 mutation

E) Splenomegaly

Ans: A

Q2:Which of the following can’t be found in Myelodysplasic syndrome:

A) Polycythemia

B) Hyposegmented neutrophils

C) Small megakarycytes

D) A little elevated number of myeloblasts

E) Hypercellular bone marrow

Ans: A

Q3:Which of the following is false regarding Myelodysplasic syndrome:

A) Hypersegmented nuclei in neutrophils

B) Ring sideroblasts

C) Most patients are old

D) Mutations in epigenetic factors that regulate DNA methylation and histone modifications

Ans: A

Q4:Wrong about CML:

A) Convert only to AML

B) Most common MPN

C) Mutation is present in all BM cells

D) Spent phase rarely develops

Ans: A

Q5:82-years-old with pancytopenia, blasts are less than 1%, neutrophils are hyposegmented and megakaryocytes are small, choose the right statement:

A) Patient must have chemotherapy

B) The disease causes bone lytic lesions

C) t(12:21) is common here

D) Increased risk of transformation to AML

Ans: D

Q6: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



Ans: C

Q7: Which of the following won’t be helpful with thrombopoietin receptor mutation:

A) Imatinib

B) JAK2 inhibitor

C) Stem cell transplant

Ans: A

Q8: 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

Ans:B

Q9: Basophilia + blasts < 5%:

A) CML

B) PV

C) CLL

Ans:A

Q10: Which of the following is false regarding myelodysplastic:

A) Hyper segmented nuclei in neutrophils

B) Ring sideroblasts

C) Most patients are old

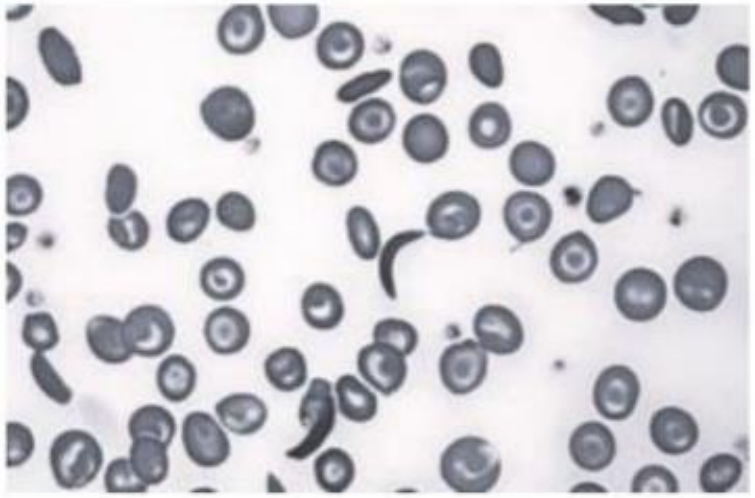
D) Mutations in epigenetic factors that regulate DNA methylation and histone modifications

Ans:A

LAB

Q1 : Which of the following is not related to the condition right picture:

A) Heterogeneous mutation on the beta chain
B) Autosplenectomy
C) stroke

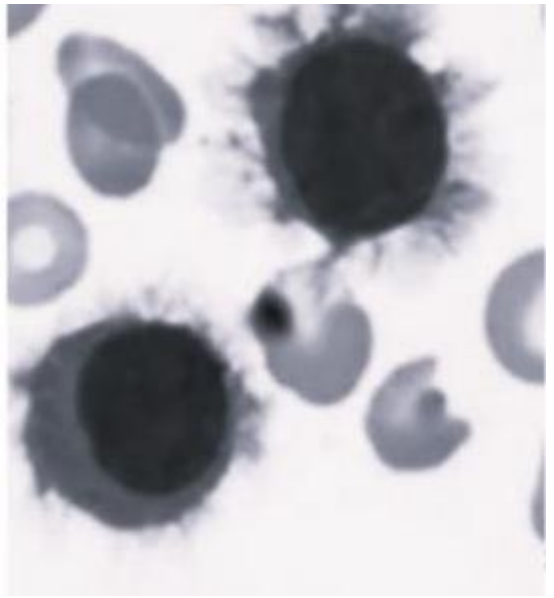


Ans: A

Q2 :Which gene is mutated in the following cells

A) warburg metabolism

B) BRAF mutation



Ans: B

Q3 : All the following are helpful , but which one is not effective in diagnosing

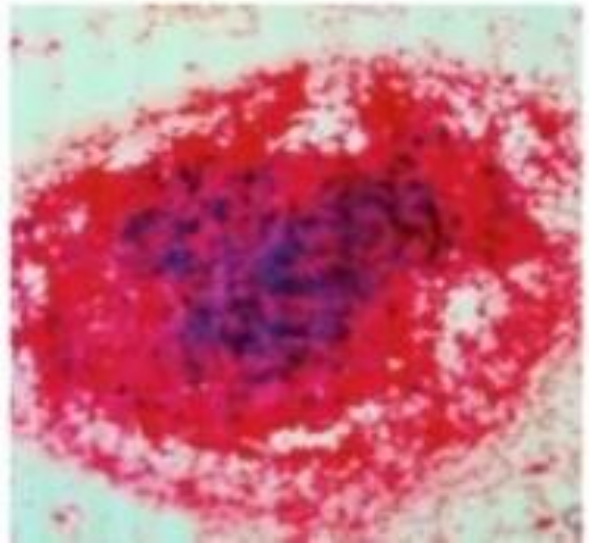
A) elevated HgA2

B) Decrease in ferroportin

C) increase hepcidin level

D) High TIBC (toatal iron binding capacity)

E) long history of cancer



Ans: A

Q4 : All the following are seen in the disease that causes this feature in blood sample except:

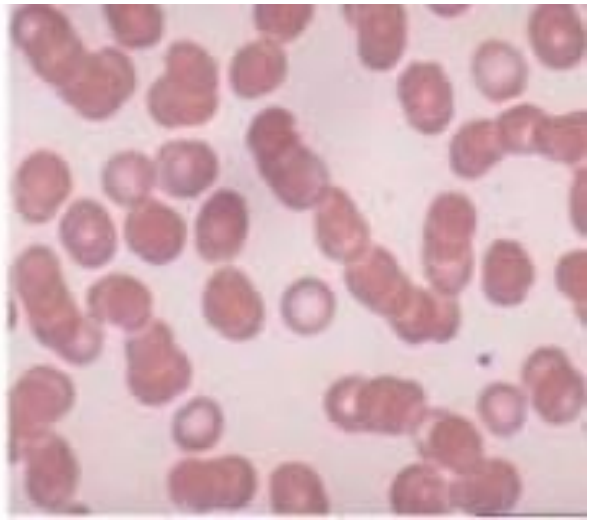
A) Hypercalcemia

B) Amyloidosis

C) Renal failure

D) bone fractures

E) plasma cells are less an 5% of bone marrow cells



Ans: E

Q5 : All of these seen in a disease that cause the morphology in the picture , except:

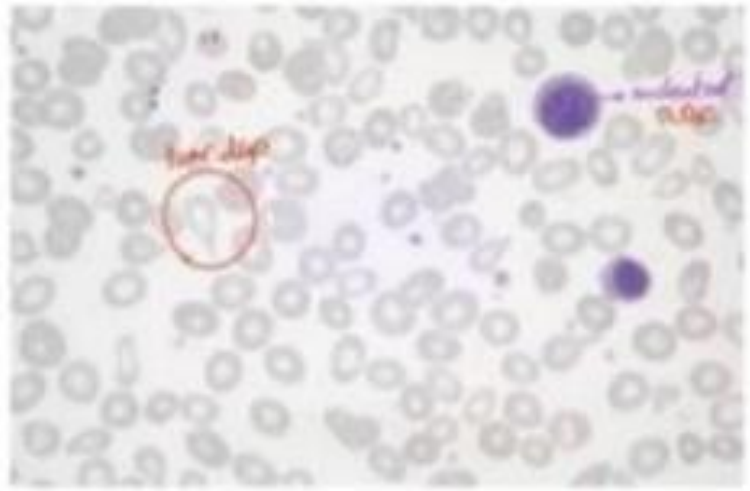
A) JAK2 mutation

B) Shift to the left neutrophils

C) Mild Splenomegaly

D) Thrombocytopenia

E) Anemia



Ans: C

Q6 : This morphlogy indicates disease that is known by :

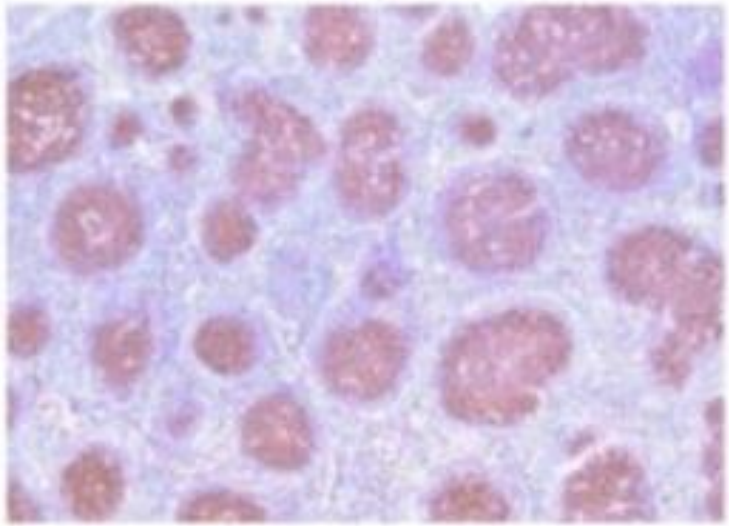
A) The presence of follicular proliferation

B) The presence of centroblasts and centrocytes

C) CD34

D) The presence of jak2 Mutation

E) In early stages it is high grade



Ans: B

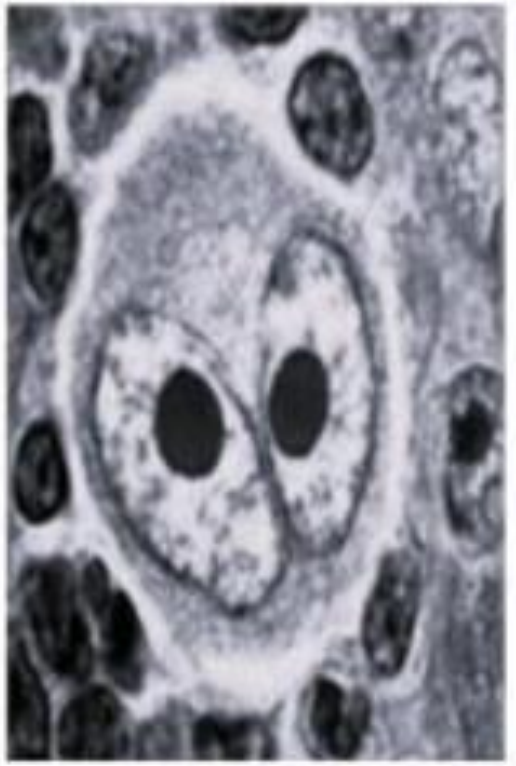
Q7 : What is the marker that can be present on the cell in the rig

A) CDa1

B) CD13

C) CD 1b

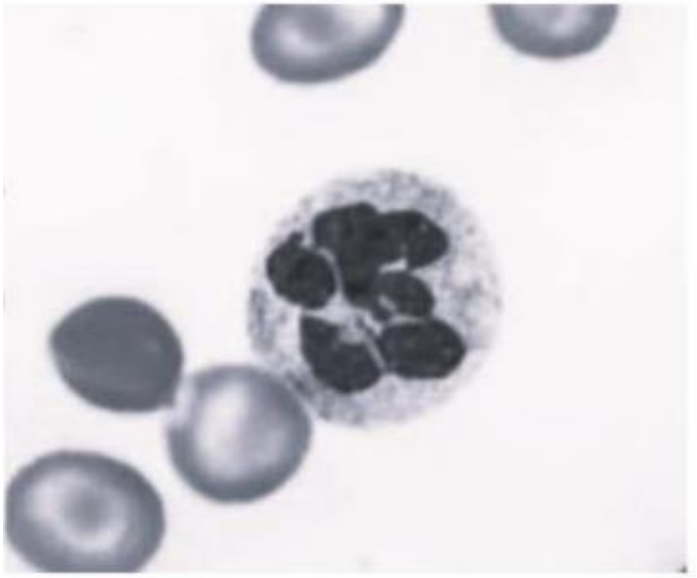
D) CD 30



Ans: D

Q8 : The following cell is associated with which condition:

Answer : Macrocytic anemia.



Ans: B

رسالة من الفريق العلمي:



سُورَةُ الفَاتِحَة

بِسْمِ ٱللَّهِ ٱلرَّحْمَٰنِ ٱلرَّحِيمِ ﴿١﴾
ٱلْحَمْدُ لِلَّهِ رَبِّ ٱلْعَٰلَمِينَ ﴿٢﴾
ٱلرَّحْمَٰنِ ٱلرَّحِيمِ ﴿٣﴾ مَٰلِكِ يَوْمِ ٱلدِّينِ ﴿٤﴾
إِيَّاكَ نَعْبُدُ وَإِيَّاكَ نَسْتَعِينُ ﴿٥﴾ ٱهْدِنَا
ٱلصِّرَٰطَ ٱلْمُسْتَقِيمَ ﴿٦﴾ صِرَٰطَ ٱلَّذِينَ أَنْعَمْتَ
عَلَيْهِمْ غَيْرِ ٱلْمَغْضُوبِ عَلَيْهِمْ
وَلَا ٱلضَّآلِّينَ ﴿٧﴾

For any feedback, scan the code or click on it

Corrections from previous versions:

Versions	Slide # and Place of Error	Before Correction	After Correction
V0 → V1			
V1 → V2			