



قائمة الاسئلة 08:42 2025-04-21

اللوكيميا - الرابع - مختبر اتكلية الطب والعلوم الصحية - درجة الامتحان (70)

أ.د. حافظ النود

- 1) The total WBC count range is
  - 1) - More in men than women
  - 2) - More in non-pregnant than pregnant women
  - 3) - More in adults than children
  - 4) + More in White than Middle Eastern people
- 2) In leukemoid reaction, the total WBC count is
  - 1) -  $>50 \times 10^9 /L$
  - 2) -  $>11 \times 10^9 /L$
  - 3) -  $<100 \times 10^9 /L$
  - 4) +  $<50 \times 10^9 /L$
- 3) The malignant cause of eosinophilia is
  - 1) - Allergic reactions
  - 2) - Parasitic infection
  - 3) + Hodgkin lymphoma
  - 4) - Myelodysplastic syndrome (MDS)
- 4) Myeloblast cells  $\geq 20\%$  of WBCs in blood smear is found in
  - 1) - Acute leukemia only
  - 2) + Acute leukemia and blastic phase of CML
  - 3) - Acute leukemia and MDS with excess blasts
  - 4) - Acute leukemia and plasma cell leukemia
- 5) In which leukemia is CD13 marker mostly positive
  - 1) + AML
  - 2) - ALL
  - 3) - CML
  - 4) - MDS
- 6) The diagnostic feature of essential thrombocythemia is
  - 1) - Thrombocytosis, leucocytosis and normal red cell count
  - 2) - Thrombocytosis, leucocytosis and erythrocytosis
  - 3) - Hper-megakaryopoies in BM with thrombocytopenia in blood
  - 4) + Isolated thrombocytosis
- 7) Which of the following is required to diagnose multiple myeloma, presence of
  - 1) + Plasma cells in BM  $\geq 10\%$  of nucleated cells
  - 2) - Monoclonal protein in serum and/or urine
  - 3) - One or more of CRAB (hypercalcemia, renal failure, anemia or bone lesions) features
  - 4) - Plasma cells in peripheral blood  $\geq 10\%$  of nucleated cells
- 8) In which condition, the hemoglobin level increased, but normal RBC mass
  - 1) - Polycythemia vera
  - 2) + Relative polycythemia
  - 3) - Secondary polycythemia
  - 4) - Splenomegaly
- 9) Positive myeloperoxidase stain is mostly used to diagnose
  - 1) - CML
  - 2) - ALL
  - 3) + AML
  - 4) - MDS



- 10) Leucoerythroblastic picture in blood film is characteristic feature of
- 1) - MDS
  - 2) - Aplastic anemia
  - 3) + Primary myelofibrosis
  - 4) - Acute leukemia
- 11) Reactive lymphocytes are commonly seen in
- 1) - Acute bacterial infections
  - 2) - Chronic bacterial infections
  - 3) + Acute viral infections
  - 4) - Lymphoid leukemia
- 12) Increased erythropoietin (TPO) level is found in
- 1) - Polycythemia vera
  - 2) - Relative erythrocytosis
  - 3) + Secondary polycythemia
  - 4) - Essential thrombocythemia
- 13) Chromosomal abnormalities t(9;22) is found in
- 1) - Most CLL and few AML
  - 2) - Most CML and few AML
  - 3) + Most CML and few ALL
  - 4) - Most CML and few CLL
- 14) At birth, neonates (newborns) have
- 1) - More lymphocytes than neutrophils
  - 2) + More neutrophils than lymphocytes
  - 3) - More immature myeloid cells than mature myeloid cells
  - 4) - More immature erythroid cells than mature erythroid cells
- 15) The diagnostic feature of myelodysplastic syndrome is
- 1) - Hypercellular BM with neutropenia in blood
  - 2) + Hypercellular BM with pancytopenia in blood
  - 3) - Hypocellular BM with pancytopenia in blood
  - 4) - Ineffective hemopoiesis BM with basophilia in blood
- 16) Immunophenotyping of blast cells is important to
- 1) - Distinguish between leukemia and leukemoid reactions
  - 2) - Identify the cause of leukemia
  - 3) + Determine the blast cell lineage
  - 4) - Determine the need for cytogenetic analysis
- 17) The benign cause of neutrophilia is
- 1) - Chronic myeloid leukemia
  - 2) - Myeloproliferative disorders
  - 3) - Severe exercise
  - 4) + Metabolic disorders
- 18) The characteristic feature of CML includes which of the following
- 1) - Mostly occurs in elderly
  - 2) + Splenomegaly
  - 3) - Enlarged lymph nodes
  - 4) - Blasts  $\geq 20\%$  of WBC in BM or blood
- 19) Monomorphic (same size and shape) lymphocytosis is mostly found in
- 1) - Viral infection
  - 2) - Leukemoid lymphocytic reaction
  - 3) + Malignant lymphocyte disorders



- 4) - All the choices
- 20) Which of the following is useful for diagnosis B-CLL
- 1) - CD21
  - 2) ☒ CD19
  - 3) - CD8
  - 4) - CD4
- 21) Which genetic abnormality is mostly present in polycythemia vera
- 1) - CALR
  - 2) - BCR-ABL1
  - 3) ☒ JAK2
  - 4) - t(9;22)
- 22) Which of the following is found in leukemoid reaction
- 1) - Blast cells  $\geq 10\%$  in BM or blood
  - 2) - Basophilia
  - 3) - Positive Philadelphia chromosome
  - 4) ☒ High neutrophil alkaline phosphatase (NAP)
- 23) Absolute neutrophilia is best described as
- 1) - More than 80% neutrophils of WBC with normal total WBC count
  - 2) - More neutrophils than lymphocytes in blood
  - 3) - Presence of immature neutrophils in peripheral blood
  - 4) ☒ Neutrophil count more than  $7.5 \times 10^9/L$  in blood
- 24) Which test is required to confirm CML diagnosis?
- 1) - Neutrophil alkaline phosphatase
  - 2) ☒ Cytogenetic analysis
  - 3) - Peripheral blood smear
  - 4) - Bone marrow examination
- 25) Reactive lymphocytes are usually characterized by
- 1) - Prominent nucleoli
  - 2) - Fine chromatin
  - 3) ☒ Polymorphonic (different size and shape) lymphocytes
  - 4) - Small amount of cytoplasm
- 26) Most patients are diagnosed in which phase of CML
- 1) - Accelerated phase
  - 2) - Blastic phase
  - 3) ☒ Chronic phase
  - 4) - Fibrotic phase
  - 5) -
- 27) Basophilia is usually seen in
- 1) - Chronic bacterial infections
  - 2) - Drug hypersensitivity
  - 3) ☒ CML
  - 4) - Multiple myeloma
- 28) Which abnormal shaped red cells is found in primary myelofibrosis?
- 1) - Helmet cells
  - 2) - Target cells
  - 3) - Schistocytes
  - 4) ☒ Teardrop cells
- 29) Which of the following finding is considered erythroid dysplasia?
- 1) - Howell-Jolly bodies



- 2) - Heinz bodies  
3) - Poikilocytosis  
4) + Increased ringed sideroblasts
- 30) What is Pelger–Huet anomaly  
1) - Hypersegmented neutrophils  
2) + Hyposegmented and hypogranulation neutrophils  
3) - Agranular neutrophils  
4) - Neutrophils with toxic granulation and Dohle bodies
- 31) CLL is commonly a neoplasm of which white blood cell?  
1) - T lymphocytes  
2) - Neutrophils  
3) + B lymphocytes  
4) - Monocytes
- 32) Which of the following statements is true of smudge cells?  
1) - They are larger than normal lymphocytes  
2) + They are an artifact resulting from peripheral smear slide preparation  
3) - They are reactive lymphocytes  
4) - They are actually monocytes
- 33) The cells of CLL are morphologically identical to  
1) - Acute lymphoblastic leukemia  
2) + Small lymphocytic lymphoma  
3) - Infectious mononucleosis  
4) - Sézary syndrome
- 34) Lymphoma is different from leukemia in that it originates in the:  
1) - Bone marrow  
2) - Breast tissue  
3) + Lymphatic tissue  
4) - Circulating lymphocytes
- 35) Monoclonal B-lymphocytosis less than  $5 \times 10^9 /L$  is found in  
1) - Most normal older people  
2) + Some normal older people  
3) - Most B-CLL patients  
4) - Some B-CLL patients