HEMATOLOGY - TEST 2

1. Acute Myeloid Leukemia – investigations:
   a. CBC (Cell Blood Count) and differentiation
   b. Bone marrow -aspiration & biopsy
   c. CT/MRI
   d. Ferritin level
   e. None of the above

2. *Acute Lymphoblastic Leukemia - Clinical features:
   a. Infections, bleeding, anaemia
   b. Widespread lymphadanopathy
   c. Splenomegaly
   d. CNS signs
   e. All of the above

3. Acute Lymphoblastic Leukemia – Specific Treatment:
   a. Stem cell transplant for all as induction therapy
   b. Induction,
   c. Consolidation
   d. Maintenance for 2 years
   e. CNS prophylaxis

4. Iron deficiency anemia - Etiology:
   a. Pregnancy and Lactation
   b. Achlorhydria
   c. GI bleeding
   d. Stress
   e. Bone pain

5. *Laboratory findings in Iron deficiency anemia:
   a. Anemia - Low hemoglobin level, low RBC
   b. Blood Smear - Microcytic, Hypochromic; Aniso- & Poikilocytosis
   c. Serum Ferritin - Low
   d. Bone marrow showing absence of stainable iron
   e. All of the above

6. Which of the following situations may trigger pathological mechanisms CID:
   a. bacterial infection
   b. acute promyelocytic leukemia
   c. acute hemolysis
   d. advanced iron deficiency
   e. hemorrhagic shock, septic shock

7. Which of the following are forms of Low grade lymphoma:
   a. Small lymphocytic lymphoma
   b. Lymphoblastic lymphoma
   c. Burkitt's lymphoma
   d. Follicular small cleaved lymphoma
   e. Follicular mixed lymphoma

8. Clinical Features of Non Hodgkin Lymphomas:
   a. Lymphadenopathy
   b. Cytopenias
   c. Systemic symptoms
   d. Hepatosplenomegaly
   e. Fractures

9. * What is an indolent lymphoma:
   a. A benign lesion
   b. A premalignant lesion
   c. A lymphoproliferation which untreated can survive years
   d. A lymphoproliferation which untreated can survive months
   e. A lymphoproliferation which untreated can survive weeks

10. Treatment of Non Hodgkin Lymphomas contains:
   a. Chemotherapy
   b. Radiation therapy
   c. Monoclonal antibody therapy
   d. Bone marrow and stem cell transplants
   e. None of the above

11. Chemotherapy Regimens in Hodgkins Lymphoma:
   a. CHOP
   b. MOPP
   c. ABVD
   d. FCR
   e. BEACOPP

12. In multiple myeloma, clinical manifestations include:
   a. Neuropathy
   b. Pain due to spinal compression
   c. Pathological fracture
   d. Cough
   e. Nephropathy

13. In multiple myeloma the following laboratory changes may occur:
   a. More than 30% blasts in the peripheral blood
   b. Anemia
   c. High Quantitative serum monoclonal immunoglobulins (IgA, IgG, IgM)
   d. Hypercalcemia
   e. Clotting disorders

14. * Waldenstom Macroglobulinemia is:
    a. Granulocytic neoplasia
    b. Pulmonary Neoplasia
    c. Lymphoplasmocytic neoplasia
    d. Renal neoplasia
    e. Anemia

15. Changes in Macroglobulinemia Waldenstom laboratory include:
    a. Anemia
    b. Polyglobulia
    c. Marrow infiltrate with limfoplasmocytes
    d. Thrombocytopenia
    e. Over 30% Blastcells in peripheral blood

16. * Which of the following non-invasive exploration can not view the spleen:
    a. Hepatosplenic scintigraphy
    b. Ultrasonography
    c. Abdominal computer tomography (CT)
    d. Radioisotope techniques for determining the lifespan of the erythrocytes with visualization of the spleen and the accessories spleens using 51Cr
    e. Chest Xrays

17. Causes of massive splenomegaly:
    a. Chronic Myeloid Leukemia
    b. Malignant Lymphomas
    c. Chronic lymphocytic leukemia
    d. Pneumonia
    e. Gaucher's disease

18. Indications for splenectomy:
    a. To a staged and control a disease (lymphoma, hereditary spherocytosis)
    b. To remove secondary hypersplenism consequences created by another condition.
    c. In cases of traumatic rupture or less freguent, in cases of spontaneous rupture with intra-abdominal haemorrhage
    d. Urinary Tact Infection
    e. Atopic Dermatitis

19. The clinical presentation of chronic myeloid leukemia - CML include:
    a. Splenomegaly
    b. Weight loss
    c. Early Satiety
    d. Night Sweats
    e. Blindness

20. Treatment of chronic myeloid leukemia - CML include:
    a. Hydroxiuree
    b. Melphalan
    c. Interferon
    d. Allotransplant
    e. CHOP therapy

21. * In general chronic lymphocytic leukemia, non-specific signs are:
    a. Fatigue
    b. Weight Loss
    c. Night sweats
    d. Loss of appetite
    e. All of the above

22. Biological criteria for positive diagnosis in chronic lymphocytic leukemia are:
    a. Peripheral blood - more than 5,000 lymphocytes/mmc, cellular shades
    b. Bone marrow - over 40% lymphocytosis
    c. Peripheral blood - more than 30% blasts
    d. In bone marrow - more than 30% blasts
    e. Bone marrow - more than 30% plasma cells

23. The following medications are used to treat chronic lymphocytic leukemia:
    a. Hydroxiurea
    b. Alkylating agents
    c. Fludarabine
    d. Monoclonal antibodies
    e. Melphalan

24. Clinical manifestations in ITP occurs slowly in a few months and consist of:
    a. Purpura
    b. Petechiae,
    c. Haemorrhagic bullae on mucosa
    d. Epistaxis
    e. Infections

25. Treatment of ITP includes:
    a. Prednisone
    b. Splenectomy
    c. Immunoglobulins
    d. Immunosuppressive agents
    e. Antidepressants

26. *Clinical features of Acute Myeloid Leukemia:
    a. Fever, malaise, anaemic symptoms, infections
    b. Bleeding, purpura, spontaneous bruising
    c. Leucostatic signs
    d. Soft tissue infiltration
    e. All of the above

27. Acute Myeloid Leukemia – Treatment:
    a. Hydration & allopurinol
    b. Vitamin B12 substitution
    c. RBC & platelet support
    d. Specific treatment - Induction + consolidation
    e. Iron products

28. FAB classification in Acute Lymphoblastic Leukemia (L1 – L3):
    a. L2 – Homogenous, small blasts, with scanty cytoplasm. Regular nuclear shape.
    b. L1 – Homogenous, small blasts, with scanty cytoplasm. Regular nuclear shape.
    c. L3 – Heterogenous, large blasts. Variable nucleus and cytoplasm
    d. L2 – Heterogenous, large blasts. Variable nucleus and cytoplasm
    e. L3 – Homogenous, large cells, basophilic with cytoplasmic vacuolation.

29. Microcytic hypocromic anemia has the following features:
    a. Low MCV
    b. Increased MCV
    c. Increased MCHC
    d. Decreased MCHC
    e. Characteristic peripheral blood smear – microcytic, poichilocytosis, hypocromia

30. The diferential diagnosis of megaloblastic anemia is made with:
    a. Myelodisplastic syndromes
    b. Thalasemia
    c. Hereditary spherocytisis
    d. Iron deficiency anemia
    e. Leukemias

31. Megaloblastic anemia – Etiology:
    a. Malnutrition
    b. Bleeding
    c. Gastrectomy, Ileal resection
    d. Intrinsic factor Antibody - Pernicious anemia
    e. Inflammatory bowel disease

32. * Haemophilia A is:
    a. congenital deficiency of Factor VIII
    b. congenital deficiency of Factor IX
    c. congenital deficiency of Factor XI
    d. congenital deficiency of von Willebrand Factor
    e. congenital deficiency of factor VIII, IX and XI

33. Which of the following are forms of High grade lymphoma:
    a. Small lymphocytic lymphoma
    b. Lymphoblastic lymphoma
    c. Burkitt's lymphoma
    d. Large cell immunoblastic lymphoma
    e. Follicular mixed lymphoma

34. * What is the essential laboratory examination in the diagnosis of NHL:
    a. Histopathological examination associated with immunohistochemistry of biopsied piece
    b. Determination of folate and vitamin B12 in serum
    c. Complete blood counts
    d. Determination of serum albumin
    e. Pearls stain of bone marrow smears

35. Which of these explorations are needed in the diagnosis and staging of NHL:
a. Histopathological examination
b. Complete blood counts
c. X-ray, CTscan, MRI
d. Bone marrow biopsy
e. Serum ferritin

36. Which of the following histological entities are subtypes of Hodgkin lymphoma:
a. lymphocyte rich
b. nodular sclerosis
c. mixed cellularity
d. lymphocyte depletion
e. diffuse large cell

37. * In multiple myeloma the main clinical manifestation is:
a. Cough
b. Dyspnea
c. Bone pain
d. Fever
e. Skin peeling

38. Major diagnostic criteria for multiple myeloma are:
a. Presence of a monoclonal serum globulin (> 3.5 g% for IgG,> 2 g% for IgA)
b. Bone marrow plasmocytes of 10-30%
c. More than 30% blasts in peripheral blood
d. Bone marrow plasmocytes > 30%
e. Histopathologic diagnosis of plasmacytoma from the biopsied tissue

39. Specific treatment of multiple myeloma may include:
a. Polychemotherapy
b. Autotransplant
c. Interferon alfa
d. Omeprazole
e. Antidepressants

40. * Macroglobulinemia Waldenstom is characterized by:
a. Thyroid hypertrophy
b. Granulocytic hyperplasia
c. Megaloblastic Deviation
d. Over 30% Blastcells in the bone marrow
e. Hyperproduction of monoclonal IgM

41. The spleen has several functions:
a. It is a specialized organ in the immune response
b. Has a role in breathing
c. It has functions in the transport
d. Has a role in the seizure and the removal of abnormal blood cells
e. In pathological situations, the spleen can be a major place in hematopoiesis

42. The most common causes of splenomegaly are:
a. Infiltrative diseases of the spleen
b. Malaria
c. Hemolytic anemias
d. Acute respiratory failure
e. Myeloproliferative syndromes

43. Hypersplenism is characterised by:
a. Splenomegaly
b. Cytopenia
c. Normal or hyperplasic bone marrow
d. Response to splenectomy
e. No correct answer

44. Laboratory picture of chronic myeloid leukemia - CML include:
a. Leukopenia
b. Leucocytosis
c. Appearing in the peripheral blood of granulocytes in all stages of development, with a predominance of mature neutrophils and nonsegmented neutrophils
d. Basophilia
e. More than 40% lymphocytes in the bone marrow

45. The differential diagnosis of chronic myeloid leukemia - CML is made with:
a. Polycythemia vera (PV)
b. Multiple myeloma
c. Lung cancer
d. Idiopathic Myelofibrosis (MMM)
e. Essential thrombocythemia (ET)

46. Treatment of polycythemia vera (PV) includes:
a. Blood transfusion
b. Phlebotomy
c. Hydroxiuree
d. Iron substitution
e. Erythropoietin

47. * In chronic lymphocytic leukemia the onset can consist of:
a. Detection a Hyperleukocytosis with occasion of some routine investigations
b. The finding of generalized lymphadenopathy
c. The finding of splenomegaly (associated lymph nodes, isolated exception)
d. Repeated recurrent infections
e. All of the above

48. The following are real about Binet Classification for CLL:
a. Stage A. < 3 involved areas, Hb > 10g%, Plt >100G/L
b. Stage B. > 3 involved areas, Hb > 10g%, Plt > 100G/L
c. Stage C. - any number of involved areas, Hb < 10g%, Plt < 100G/L
d. Stage C. < 3 involved areas, Hb > 10g%, Plt >100G/L
e. Stage A. - any number of involved areas, Hb < 10g%, Plt < 100G/L

49. ITP (autoimmune or idiopathic thrombocytopenic purpura) is an acquired disease of children and adults, characterized by:

a. Thrombocytosis
b. Thrombocytopenia
c. Bone marrow of normal appearance
d. Absence of other conditions potentially associated with thrombocytopenia
e. Anemia

50. Potential side effects of Non Hodgkin Lymphomas therapy:

a. Nausea, vomiting, diarrhea
b. Fractures
c. Myelosuppression—low blood counts
d. Alopecia —hair loss
e. Fatigue