

## 5. HEMATOLOGY

1. A 12 years old boy complains of acute development of purpura on the dependent areas of his body 2 weeks after a Upper Respiratory Tract Infection. The purpura doesn't blanch on pressure, tests reveal: Hb=12, 1. platelet count=50, WBC=5, Bleeding time=10mins, APTT=40s PT=1.02./What is the most likely diagnosis?

- a. ITP (Idiopathic Thrombocytopenic Purpura)
- b. TTP (Thrombotic Thrombocytopenic Purpura)
- c. Von Willebrand's disease
- d. Hemophilia A
- e. Hemophilia B

2. A 3-year-old child is brought by his mother. Exam: bruises on the buttocks. Mother also gives history of runny nose 2 weeks ago. What is the single most appropriate next action?

- a. Check child protection register
- b. Coagulation profile
- c. Skeletal survey
- d. Continue regular child care
- e. Inform police

3. A 4 years old boy presents with recurrent episodes of self limiting spontaneous bleeding. Coagulation test: Factor VIII decreased. His fatbleeding. Coagulation a similar illness. What is the most likely diagnosis?

- a. Hemophilia A
- b. Hemophilia B
- c. Von willebrand's disease
- d. ITP
- e. TTP

4. Henoch-schonlein purpura has

- a. papular rash
- b. non blanching rash
- c. vesicular rash
- d. pustular rash
- e. morbilliform

5. All of the following are true of thalassemia major, except:

- a. Splenomegaly
- b. Target cells on peripheral smear
- c. Microcytic hypochromic anemia
- d. Increased osmotic fragility
- e. Increased reticulocytes count

6. Which one of these is most useful in the staging of Hodgkin's lymphoma?

- a. Clinical examination
- b. Erythrocyte sedimentation rate and lactate dehydrogenase
- c. Bone marrow trephine
- d. CT Scan
- e. Lymphatic spread

7. A 10-year-old boy is admitted to the hospital because of bleeding from various sites. Laboratory finding are as following: Platelets-50,000/u.L, prolonged PT, TT and APTT. Which of the following is the most likely cause of his bleeding?

- a. Immune thrombocytopenic purpura (ITP)
- b. Disseminated intravascular coagulation (DIC)
- c. Vitamin K deficiency X
- d. Hemophilia A K.
- e. Hemophilia

8) Anemia with low MCV is present in following EXCEPT:

- a. Iron deficiency anemia
- b. B Thalassemia minor
- c. Vitamin B 12 deficiency
- d. Copper deficiency
- e. None of above

9) are true Regarding differential diagnosis of hypochromic microcytic anemia. All of the following EXCEPT one:

- a. Beta thalassemia major
- b. Folic acid and vitamin B 12 deficiency
- c. Iron deficiency
- d. Lead poisoning
- e. Hook worm infestation

10. A 6 year old girl complains of acute development of Blue spots and bruises on the dependant areas of her body 2 weeks after a URTI It doesn't blanch on pressure, tests reveal: Hgb = 12, platelet count = 50/mm, bleeding time = 12 min, APTT & PT are normal. What is the most likely diagnosis?

- a. ITP
- b. TTP
- c. Von Willebrand's disease
- d. Hemophilia A
- e. Hemophilia B

1.A	2.B	3.A	4.B	5.D
6.D	7.C	8.C	9.B	10.A



11. A healthy term infant has prolonged bleeding at the time of circumcision even requiring blood transfusion. The most likely diagnosis?
- Dissiminated intravascular coagulation
  - Factor IX deficiency
  - Factor VIII deficiency
  - Protein C deficiency
  - Von Willebrand disease
12. Being severely malnourished, a child is found to have bleeding gums and easy bruising along with numerous poorly healing skin ulcerations. Assuming that these findings resulted from Vitamin C deficiency, what is the likely mechanism of these findings?
- Defective DNA synthesis
  - Defective production of  $\beta$ -aminobutyric acid
  - Impaired carboxylation of coagulation factors II, VII, IX & X
  - Impaired hydroxyproline and hydroxylysine production
  - Impaired renal 1 $\alpha$ -hydroxylase
13. A woman from IDPs camp at Bannu who had recently given birth to a new born boy with the aid of a midwife now brings her infant to the hospital because of continued bleeding & oozing from the umbilical stump it is likely that the bleeding problem is secondary to a deficiency of which of the following vitamins?
- Folic acid
  - Vitamin A
  - Vitamin D
  - Vitamin E
  - Vitamin K
14. A 4-months old infant boy has had fever (100.6°F), a persistent cough and nasal discharge for the past week. You are considering the diagnosis of pertussis. The most practical and rapid laboratory study to confirm the diagnosis is
- CBC with differential
  - Fluorescent antibody testing
  - Polymerase chain reaction
  - Serum antibody titre
  - PT, APTT
15. Among the following, the clinical finding that is most suggestive of Group A streptococcal infection in a 10 years old boy with sore throat is
- Conjunctivitis
  - Diarrhea
  - Palatal petechiae
  - Rhinorrhea
  - Tonsillar exudates
16. A 5-years-old child was admitted with history of feeling tired and lethargic all the time, bleeding gums and sore throat since the last 3 months. Exam: hepatosplenomegaly. What is the most probable diagnosis?
- ALL
  - AML
  - CML
  - CLL
  - Lymphoma
17. Splenomegaly is a consistent feature of
- Anemia due to folate deficiency
  - Iron deficiency anemia
  - G6PD deficiency
  - Teenager with sickle cell disease
  - Thalassemia
18. Which of the following drugs is contraindicated in G6PD deficiency except
- Ceftriaxone
  - Co-trimoxazole
  - Chloramphenicol
  - Nalidixic acid
  - Quinine sulphate
19. In hemophilia there is prolongation of the
- Bleeding time
  - APTT
  - PT
  - Thrombin time (TT)
  - Clot retraction time
20. In iron deficiency anemia, most useful diagnostic test is
- RBC protoporphyrin level
  - MCV
  - Mean corpuscular Hemoglobin (MCH)
  - TIBC (Total Iron-Binding Capacity)
  - Plasma transferrin Level
21. Microcytic anemia is present in
- Pernicious anemia
  - Folate deficiency
  - B thalassemia
  - Spherocytosis
  - Aplastic anemia



22. Thalassemia is inherited as

- a. Autosomal dominant
- b. Sex linked dominant
- c. Autosomal recessive
- d. Sex linked recessive
- e. Multifactorial

23. Visceromegaly is a consistent feature of;

- a. CAPD deficiency
- b. Iron deficiency Anemia
- c. Nutritional Anemia
- d. Thalassemia
- e. Teenage with sickle cell anemia

24. Microcytic anemia is present in:

- a. Aplastic Anemia
- b. B12 deficiency anemia
- c. Beta Thalassemia
- d. Congenital spherocytosis
- e. Folate deficiency anemia

25. All of the following drugs EXCEPT one are contraindicated in G6PD deficiency:

- a. Nalidixic acid
- b. Co-trimoxazole
- c. Paracetamol
- d. Chloramphenicol
- e. Mefenamic Acid

26. A 5-years-old child was admitted with history of feeling tired and lethargic all the time, bleeding gums and sore throat since the last 3months. Exam: hepatosplenomegaly. What is the most probable diagnosis?

- a. ALL
- b. AML
- c. CML
- d. CLL
- e. Lymphoma

27. A 6-years-old boy has completed an induction course of chemo for ALL. He has an enlarged left scrotum. What is the most appropriate next step?

- a. Herniotomy
- b. CT abdomen
- c. Biopsy
- d. Immediate surgery
- e. Reassurance

28. A 12yo boy complains of acute development of purpura on the dependent areas of his body 2wks after a URTI. The purpura doesn't blanch on pressure, tests reveal: Hgb=12, platlet count=50. WBC=5, Bleeding time=10mins, APTT=40s, PT=1.02. What is the most likely dx?

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29. A 2yo child aspirated a foreign object which was removed at the hosp. the parents are now asking how to remove it if that ever happens at home. What do you advise?

- a. Heimlich's maneuver
- b. Bring to the hospital
- c. Turn the child on his back and give thumps
- d. CPR
- e. Remove manually by fingers

30. A 3-year-old child is brought by his mother. Exam: bruises on the buttocks. Mother also gives history of runny nose 2weeks ago. What is the single most appropriate next action?

- a. Check child protection register
- b. Coagulation profile
- c. Skeletal survey
- d. Continue regular child care
- e. Inform police

31. A 4 years old boy presents with recurrent episodes of self limiting spontaneous bleeding. Coagulation test: PT normal, bleeding time normal, APTT prolonged, Factor VIII decreased. His father and uncle suffer from a similar illness. What is the most likely diagnosis?

- a. Hemophilia A
- b. Hemophilia B
- c. Von willebrand's disease
- d. ITP
- e. TTP

32. A young boy has a history of epistaxis. CBC=normal, except APTT=47s. What is the most likely diagnosis?

- a. Hemophilia
- b. ITP
- c. Sickle cell
- d. HUS
- e. Thalassemia

11.C	12.D	13.E	14.C	15.C
16.A	17.E	18.A	19.B	20.D
21.C	22.C	23.D	24.C	25.E
26.A	27.B	28.A	29.C	30.B

31.A

32.A

33. Henoch-schonlein purpura has

- a. Papular rash
- b. Non blanching rash
- c. Vesicular rash
- d. pustular rash
- e. moribilliform

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- d. Serum antibody titre
- e. PT, APTT

33.B	34.B	35.C
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