**Coagulation disorders (Hemophilia, von Willebrand disease)**

***Single choice tests***

**CS**

1. Choose the statement that is not characteristic for hemophilia:

1. hematoma is a characteristic type of bleeding
2. hemarthrosis is a characteristic type of bleeding
3. bleedings are spontaneous or late posttraumatic
4. petechiae is the most specific symptom of hemophilia
5. normal platelet count

**CS**

2. Hemophilia A represents deficit of the coagulation factor:

1. IX
2. VIII
3. XI
4. XII
5. V

**CS**

3. First line treatment for acute bleeding in a child with hemophilia A includes:

1. intravenous fluid infusions
2. epsilon-aminocaproic acid infusions
3. factor replacement infusions with cryoprecipitate
4. blood transfusions
5. platelet transfusion

**CS**

4. Choose what is contraindicated in the treatment of children with hemophilia:

1. factor replacement infusions with cryoprecipitate in case o bleeding
2. fibrin glue for local treatment in mucosal bleedings
3. proper dental hygiene is a preventive measure
4. aspirin and aspirin-containing products
5. prophylactic self-infusion of factor VIII or IX

**CS**

5. Choose the type of inheritance in hemophilia A:

1. autosomal dominant disorder
2. autosomal recessive disorder
3. X-linked recessive inheritance
4. multifactorial inheritance
5. teratogenic problem

**CS**

6. Choose the statement that is characteristic for Von Willebrand disease:

1. hematoma is a characteristic type of bleeding
2. mixed type bleeding (hematoma, petechiae, bruising)
3. skin purpura is a characteristic type of bleeding
4. unfavorable prognosis
5. frequent hemarthrosis

**CS**

7. Choose the statement that is not characteristic for Von Willebrand disease:

1. tipically patients have <50% of normal von Willebrand factor (VWF) in plasma
2. frequent nosebleeds and easy bruising
3. excessive bleeding during and after invasive procedures, such as tooth extractions and surgery
4. low platelet count
5. increased Bleeding Time test

**CS**

8. Choose the statement that is not characteristic for hemophilia A:

1. normal or low hemoglobin/hematocrit values
2. normal bleeding time and normal prothrombin time
3. prolonged activated partial thromboplastin time (aPTT)
4. low factor VIII levels (less than 50% activity)
5. low platelet count

**CS**

9. Choose the most frequent hereditary bleeding disorder in children:

1. Congenital hypofibrinogenemia
2. Hemophilia A (factor VIII deficiency)
3. Hemophilia B (factor IX deficiency)
4. Hemophilia C (factor XI deficiency)
5. Factor XII deficiency

**CS**

10. Coagulation of factor VIII has all of the following characteristics EXCEPT:

1. reduced activity in hemophilia A
2. reduced activity in classic von Willebrand disease
3. needed for normal platelet adhesion
4. reduced levels in disseminated intravascular coagulation
5. normal level in liver disease

**CS**

11. The prothrombin time, which is a test of the extrinsic or tissue coagulation pathway, is abnormally prolonged in:

1. hemophilia A
2. von Willebrand disease
3. congenital factor XIII deficiency
4. congenital factor VII deficiency
5. congenital factor XI deficiency

**CS**

12. Coagulation studies on a patient with a bleeding disorder show factor VIII coagulant activity of 10 units/dL, factor IX coagulant activity of 60 units/dL, and von Willebrand factor activity of 100 units/dL. (Normal range for all three tests is 70 to 150 units/dL.) The bleeding time was 6 minutes (normal <10 minutes). These findings are diagnostic of:

1. liver disease
2. von Willebrand disease
3. hemophilia A
4. hemophilia B
5. thrombasthenia

**CS**

13. The PTT is a useful screening test for detecting abnormally low plasma levels of:

1. factor VII
2. factor VIII
3. factor XIII
4. platelets
5. protein C

***Multiple choice tests***

**CM**

1. Clinical manifestations of hemophilia include the followings:

1. bleeding from minor traumatic lacerations of the mouth that may persist for hours or days
2. easy bruising and intramuscular hematomas
3. hematoma of the iliopsoas muscle manifest with hyperextension of the hip and externally rotated position owing to irritation of the iliopsoas
4. hemarthrosis is the hallmark of hemophilic bleeding
5. earliest joint hemorrhages appear most commonly in the ankle

**CM**

2. Indicate the diagnostic criteria of hemophilia:

1. normal or low hemoglobin/hematocrit values
2. normal bleeding time and normal prothrombin time
3. low platelet count
4. prolonged activated partial thromboplastin time (aPTT)
5. low factor VIII or IX levels

**CM**

3. Indicate causes of life-threatening bleeding in the patient with hemophilia:

1. bleeding into central nervous system
2. hemarthroses
3. external trauma
4. gastrointestinal hemorrhage
5. iliopsoas hemorrhage

**CM**

4. Indicate specific features for mild hemophilia:

1. may not be diagnosed in first years of life
2. patients frequently have spontaneous hemorrhages
3. individuals may experience prolonged bleeding after dental work or surgery
4. plasmatic activity of factor VIII or IX is between 1 and 5%
5. endogenous factor VIII can be released by the administration of desmopressin acetate

**CM**

5. Select the statements characteristic for von Willebrand disease:

1. recessive, X-linked transmission
2. autosomal-dominant transmission
3. diminishing of thrombocytes adhesion and aggregation
4. mixt bleeding type
5. frequent hemarthroses

**CM**

6. The following statements are correct for hemophilia B:

1. presence of hematomas and hemarthroses
2. increased partial activated thromboplastin time
3. prognosis for life is favorable
4. factor IX deficit
5. factor XI deficit

**CM**

7. The followings are contraindicated in hemophilia treatment:

1. cryoprecipitate
2. short-time immobilization of affected articulation
3. long-time immobilization of affected articulation
4. heparin administration
5. lyophilized concentrates of factor VIII

**CM**

8. Treatment for acute hemarthrosis in patients with hemophilia includes:

1. blood transfusion
2. cryoprecipitate transfusion
3. short-time immobilization of the joint
4. heparin administration
5. mandatory joint puncture

**CM**

9. The follows are characteristic for Von Willebrand disease:

1. autosomal type of inheritance
2. X-linked type of inheritance
3. diminishing of thrombocytes adhesion and aggregation function
4. prolonged bleeding time
5. large and profound hematomas

**CM**

10. The typical clinical manifestations of Von Willebrand disease are:

1. gum bleeding
2. epistaxis ( nasal bleeding)
3. hematomas
4. erythematous/maculopapular rash
5. Petechiae, ecchymosis

**CM**

11. Von Willebrand disease has the following characteristics:

1. autosomal type of inheritance
2. isolated disorder of primary hemostasis
3. isolated disorder of secondary hemostasis
4. mixt type coagulopathy
5. X-linked trait

**CM**

1. For hemophilia A is characteristic:
2. is the commonest inherited bleeding disorder
3. inheritance is autosomal dominant with variable penetrance
4. severity is determined by level of factor VIIIc
5. is treated with factor VIII given by IM injection
6. is no longer treated with prophylactic factor VIII because of HIV risk

**CM**

1. The following statement concerning hereditary bleeding disorder are correct:
2. Risk of blood born infections in case of frequent transfusions
3. Antenatal diagnosis of hemophilia A is possible
4. Von-Willebrand disease is inherited as an autosomal recessive manner in the majority of patient
5. Children with hemophilia have normal prothrombin time
6. In hemophilia A, spontaneous bleeding into the joint occur when the factor VIII concentration is reduced to 20% of normal

**CM**

1. Hemophilia:
2. Doesn't cause coagulation disturbance in the newborn
3. Lack positive family history in 1/3 of the affected boys
4. Cause profound bleeding time
5. Cause prolonged APTT (test of intrinsic coagulation pathway)
6. Result from the synthesis of biologically inactive factor VIII

**CM**

1. Which of the following is true of Factor VIII antihaemophilic globulin (von Willebrand factor)?
2. released mainly by megakaryocytes
3. mediates the endothelial platelet aggregation
4. is an essential co-factor in the activities of Factor X to Factor Xa
5. released by the endothelial cells of the blood vessels
6. deficiency is a major source of bleeding in Von Willebrand's disease

**CM**

1. The following are component of intrinsic coagulation:
2. Prothrombine
3. Factor XII
4. Factor IX
5. Fibrinogen
6. Factor VII

**Coagulation disorders (Hemophilia, von Willebrand disease)**

***Single choice tests***

1. D

2. В

3. С

4. D

5. С

6. В

7. D

8. Е

9. В

10. C

11. D

12. C

13. B

***Multiple choice tests***

1. А,В,D,Е
2. А,B,D,Е
3. A,C,D,E
4. A,С,Е
5. B,C,D
6. А,В,С,D
7. С,D
8. B,C
9. A,C,D
10. A,B,C,E
11. A,D
12. A,C
13. A,B,D
14. B,D,E
15. B,C,D,E
16. B,C