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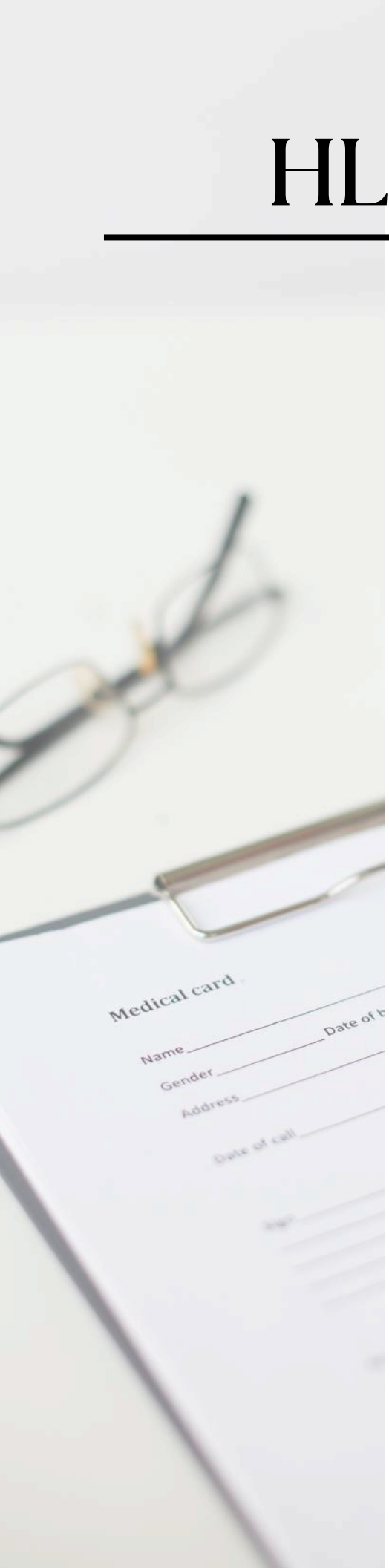

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Lecture 1

Blood Composition Function and Viscosity

HLS- Physiology

Lecture 1

1)Erythropoietin hormone is produced by ?

a . Liver .b .Spleen .

d . Liver and kidney .

e . Bone marrow .

Ans :d

2) reticulocyte index = 18 % and Hct = 15 %. What is the most explanation for this ?

a . A is anemic but B is not .

b . The bone marrow of both A and B is not working sufficiently .

c . A and B are normal .

d . Bone marrow of A is working sufficiently but B is not .

e . Bone marrow of anemic B is working sufficiently but bone marrow of anemic A is not .

Ans:e

3) hematopoiesis in adult occur in :

red bone marrow

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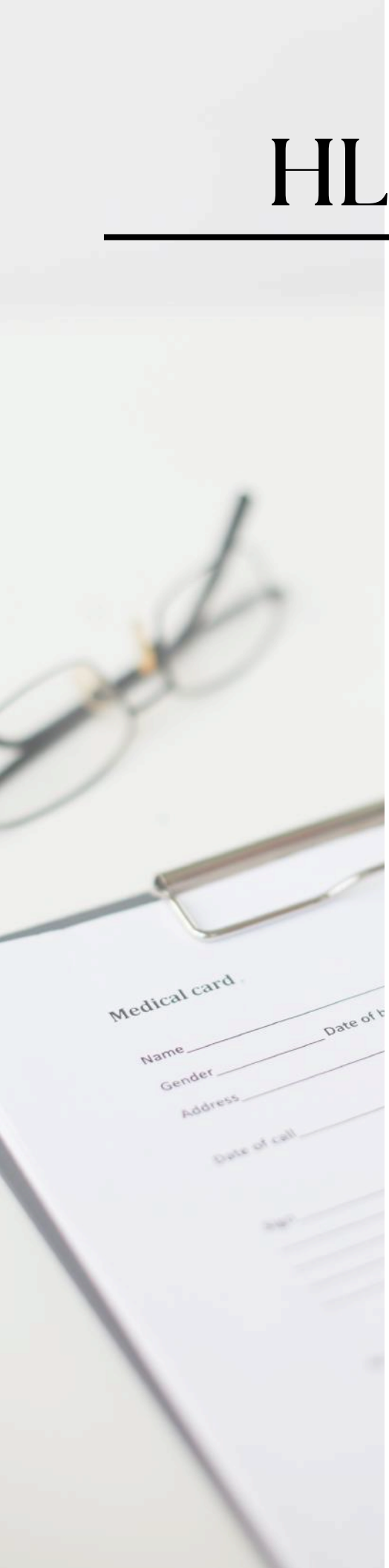

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Lecture 2

Iron metabolism and anemia

HLS- Physiology Lecture 2

1- All the following are true about iron deficiency anemia EXCEPT ?
a . Microcytic hypochromic RBCs .
b . Low hemoglobin .
c . Low serum iron .
d . Low serum ferritin .
e . Low serum soluble transferrin receptors .

Ans : e

2- Anemia associated with low reticulocytes includes all of the following EXCEPT ?
a .Hemolytic anemia .
b . Iron deficiency anemia .
c . Vitamin B 12 deficiency anemia .
d . Folic acid deficiency anemia .
e . Aplastic anemia .

Ans :a

3- values were Hb 11 .5 g /dL , Hot 35 %, MCV 92 fL and reticulocytes 5%. Total bilirubin and LDH was high . Haptoglobin was low . What is the most likely explanation for this case ?
a . Hemolytic anemia .
b . Iron deficiency anemia .
c . B 12 deficiency .
d . Sideroblastic anemia .
e . Renal failure .

Ans:a

4- One the following not associated with intravascular hemolysis
A -cold antibody
B -iron deficiency anemia
C -hemoglobinemia
D -Hemosiderinuria
E -Hemoglobinuria

Ans :a

HLS- Physiology Lecture 2

5 -Anemia with high ferritin and low serum iron and low TIBC ?
-chronic inflammation anemia.

6- Anemia of chronic inflammation :
A)low FE
B)low TIBC
C)microcytic
D)high ferretin
E)transfusion therapy

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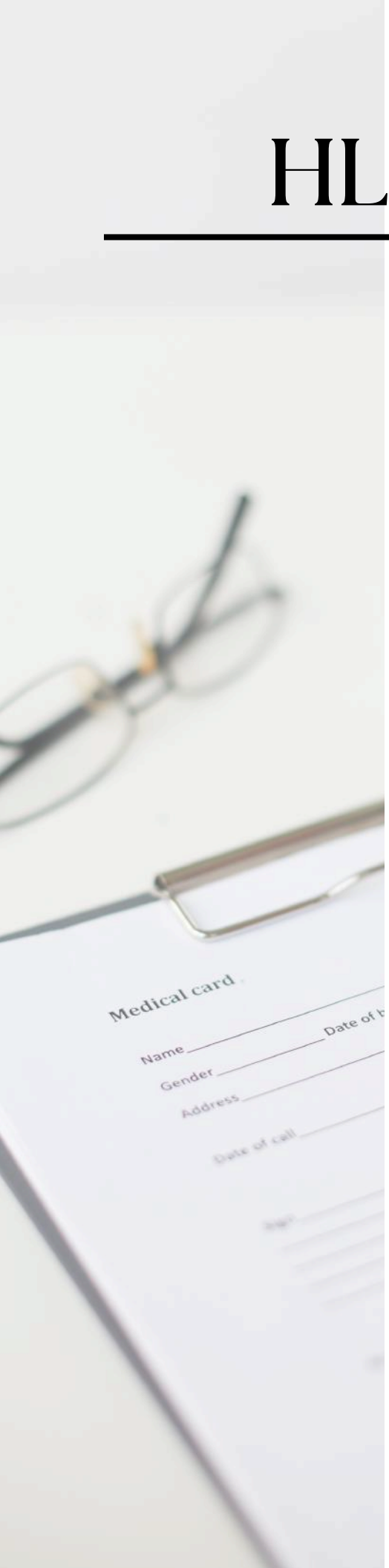

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Lecture 3

HLS- Physiology Lecture 3

1. Anemia associated with low reticulocytes includes all of the following EXCEPT?
a. Hemolytic anemia.
b. Iron deficiency anemia.
c. Vitamin B12 deficiency anemia.
d. Folic acid deficiency anemia.
e. Aplastic anemia.

Ans: a

2. A CBC of 40ys male shows 20% decrease in Hb and HCT, MCV is very low andPLT elevated than normal. his serum ferntin level was very high?
a. iron deficiency.
b. Sickle cell anemia.
c. Aplastic anemia.
d. Hemolytic anemia.
e. Anemia Of chronic disease

Ans: e

3. Woman in her last trimester. Her CBC values are Hb 9g/dl, Hct 31%, reticulocytes 0.3%, MCV 100fL. Her serum Ferritin level was normal?
a. iron deficiency anemia.
b. B12 deficiency.
c. Folic acid deficiency.
d. GIT bleeding.
e. Anemia of chronic inflammation

Ans: c

HLS- Physiology Lecture 3

4. Five-years-old Child was noted by his new pediatrician to be mildly icteric. His CBC values were Hb 11.5 g/dL, Hot 35%, MCV 92 fL and reticulocytes 5%. Total bilirubin and LDH was high. Haptoglobin was low. What is the most likely explanation for this case?

a. Hemolytic anemia.
b. Iron deficiency anemia.
c. B12 deficiency.
d. Sideroblastic anemia.
e. Renal failure

Ans: a

5. You have given two values (A, B): A: reticulocyte index =3.0%, Hct=15%.B: reticulocyte index =18% and Hct=15%. What is the most explanation for this?

a. A is anemic but B is not.
b. The bone marrow of both A and B is not working sufficiently.
c. A and B are normal.
d. Bone marrow of A is working sufficiently but B is not.
e. Bone marrow of anemic B is working sufficiently but bone marrow of anemic A is not

Ans: e

6. A 22-year-old woman complained of a 2-year history of arthralgia and her skin was pale. Laboratory studies show total RBC count of 4.7 million/mm3. hemoglobin of 11.5 gldL. platelet count of 200.000/mm3. and WBC count of 5000/mm3, The peripheral blood smear shows hypochromic and microcytic RBCs. Hemoglobin electrophoresis shows an elevated hemoglobin A2level of about 5.8%. What is the most likely diagnosis?

a. Autoimmune hemolytic anemia.
b. Beta-Thalassemia minor.
c. Anemia of chronic disease.
d. Iron deficiency anemia.
e. Infection with Malaria

Ans: b

HLS- Physiology Lecture 3

7. Beta thalassemia associated with?
Decrease hba increase hbf

8. Notrelated to sickle cell anemia
A)HbS in vein
B)Hydroxyurea
C)HbF
D)Extravascular

Ans: d

9 .2 year old boy , lowHct /lowHb/High retic/High LDH/High total bilirubin/lowHaptoglobinwith dark urine
A)hereditary spherorcytosis
B)iron deficiency
C)chronic disease
D)B9 deficiency
E)B12 Deficiency

Ans: a

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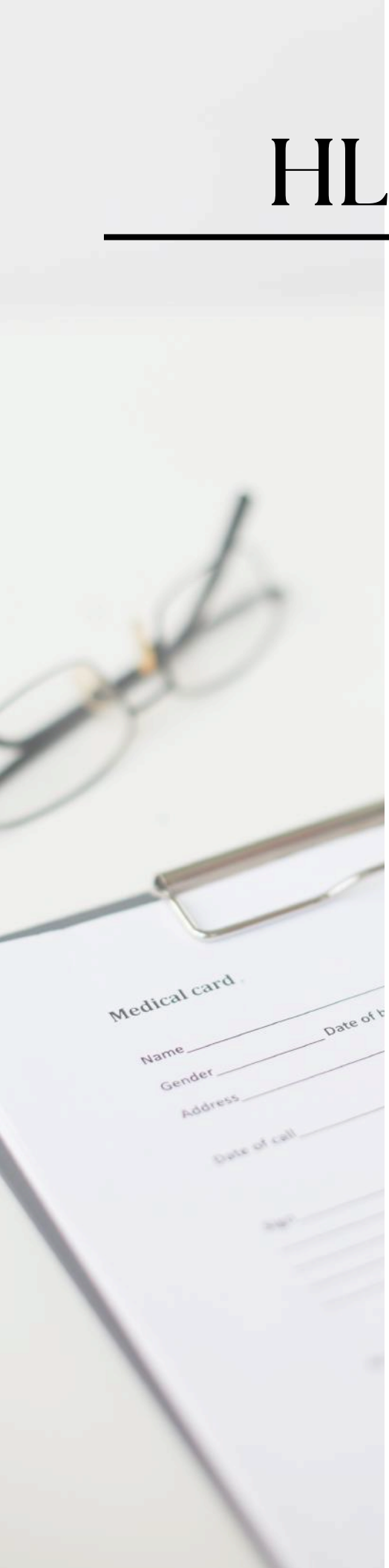

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Lecture 6

Blood grouping

HLS- Physiology Lecture 6

1) Agglutinins of ABO system?

a. Are monovalent.
b. Can cross placental barrier.
c. Belong to IgM type of immunoglobulins.
d. Are present on RBCs.
e. Are present on WBCs.

Answer:c

2)Which of the following is TRUE concerning Erythroblastosis fetalis (hemolytic disease of thenewborn)?

a. it occurs when a Rh+ mother has an Rh- child.
b. it is prevented by giving the mother a blood transfusion.
c. A complete blood transfusion after the first birth will prevent HDN.
d. The father of the child has to be Rh+.
e. This occurs when a Rh+ mother has an Rh+ child

Answer:d

3) A pregnant woman comes in for a visit. She is AB Rh- and her husband is A Rh+. This is her first child. What should be done at this time?

a. Nothing.
b. Administer anti-D immunoglobulin to the mother at this time.
c. Administer anti-D immunoglobulin to the mother after delivery.
d. Administer anti-D immunoglobulin to the child after delivery.
e. Administer anti-D immunoglobulin to the child if the child is Rh+.

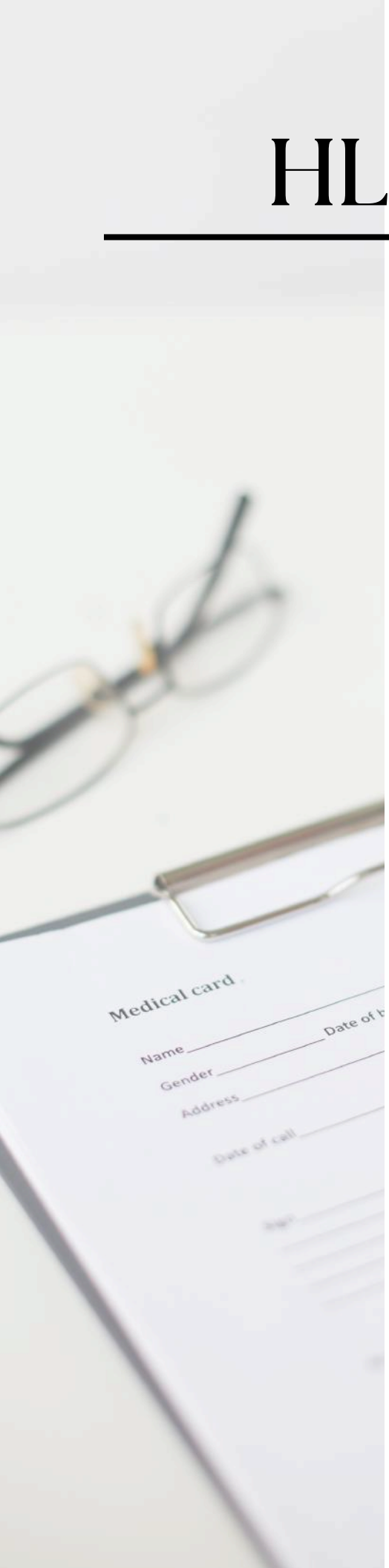
Answer: a

4)cause incompatability in Rh :

a. mother Rh-ve, father Rh +ve , baby Rh -ve
b. mother Rh +ve, father Rh +ve, baby Rh-ve
c. mother Rh-ve , father Rh +ve , baby Rh +ve

Answer:c

HLS- Physiology



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Lecture 7

Blood transfusion

HLS- Physiology Lecture 7

1)A 21-year-old female. blood type B. Her platelet count is 75,000/ul. She will need blood transfusion before and during surgery. Which of the following blood types would be used to collect platelets that are compatible with the patient?

a. Type A only.
b. Type B only.
c. Type AB only.
d. Types B and O.
e. Types A and B.

Answer:d

2)Assume that the patient has never had a transfusion. Which of the following will result in a transfusion reaction?

a. Type O Rh- packed cells to an AB Rh+ patient.
b. Type A Rh+ packed cells to an A Rh- patient.
c. Type AB Rh+ packed cells to an AB Rh+ patient.
d. Type A Rh+ packed cells to an O Rh+ patient.
e. Type O Rh- packed cells to an o Rh+ patient

Answer:d

3) Which of the following transfusion will result in immediate transfusion reaction ?

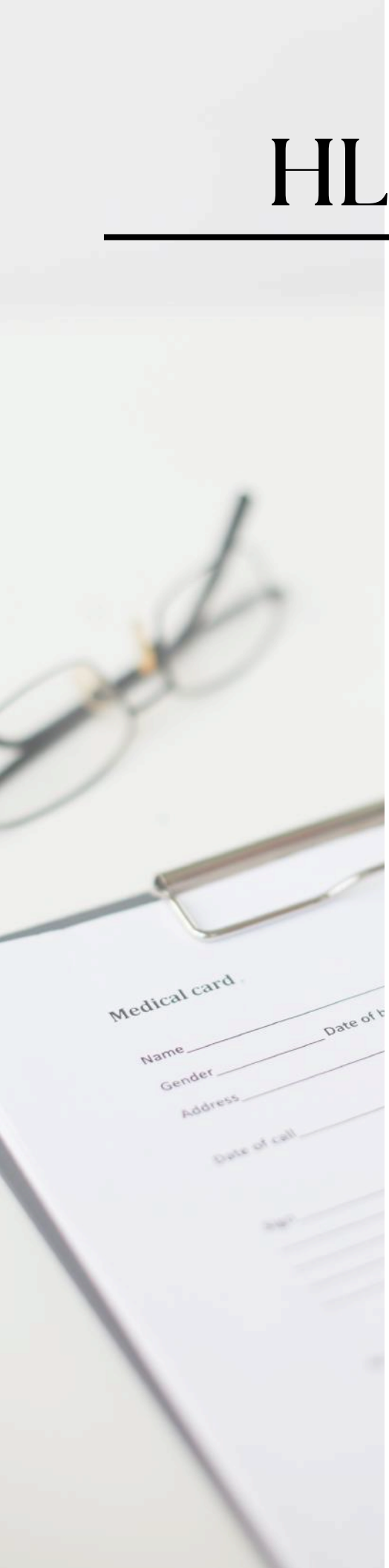
a-O Rh- whole blood to an O Rh+patient
b-A Rh- whole blood to a B Rh- patient
c-AB Rh- whole blood to an AB Rh+patient
d-B Rh- whole blood to an B Rh- patient

Answer:b

4)Person with blood group B -ve can get a transfusion for the second time from?

Answer: O -ve

HLS- Physiology



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Lecture 8

Hemostasis

HLS- Physiology Lecture 8

1) Vitamin K is important for synthesis of which of the following clotting factors?

a. IV and VIII.
b. II and VII.
c. I and IV.
d. XI and XII.
e. I and III.

Ans : b

2) The conversion of fibrinogen to fibrin is promoted by?

a. Factor X.
b. Thrombin.
c. Platelets.
d. Prothrombin.
e. Factor IX.

Ans : b

3) The coagulation pathway that begins with tissue thromboplastin is?

a. Extrinsic pathway.
b. Intrinsic pathway.
c. Common pathway.
d. Fibrin stabilization.
e. Fibrinolysis.

Ans : a

4) What is the proper pathway for the extrinsic clotting pathway?

a. Contact of blood with collagen, formation of prothrombin activator, conversion of prothrombin into thrombin, conversion of fibrinogen into fibrin threads.
b. Tissue trauma, formation of prothrombin activator, conversion of prothrombin into thrombin, conversion of fibrinogen into fibrin threads.
c. Activation of platelets, formation of prothrombin activator, conversion of prothrombin into thrombin, conversion of fibrinogen into fibrin threads.
d. Trauma to the blood, formation of prothrombin activator, conversion of prothrombin into thrombin, conversion of fibrinogen into fibrin threads.
e. Collecting blood sample on silicon coated test tubes.

Ans: b

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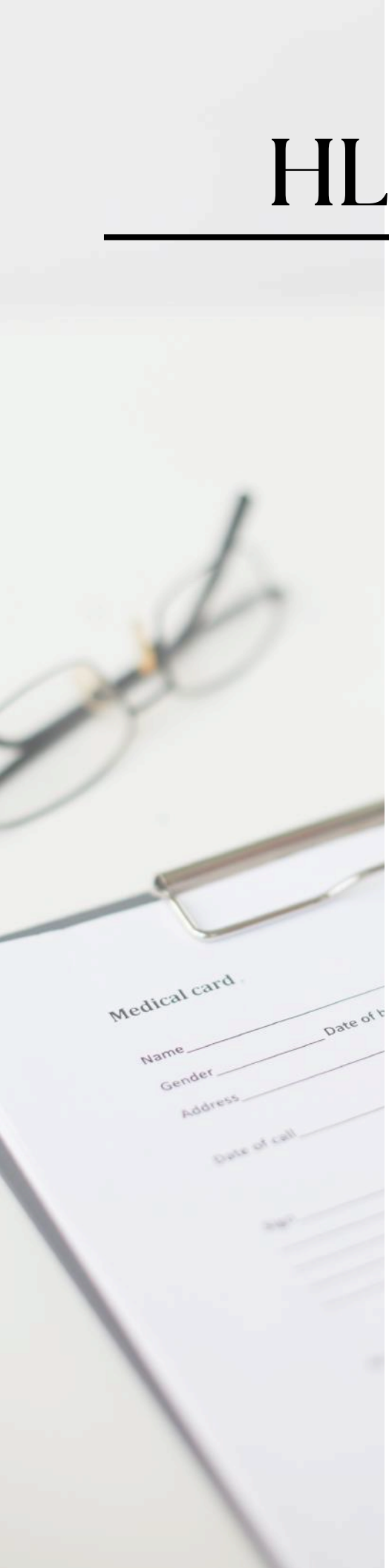

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Lecture 9

Blood lysis

HLS- Physiology

Lecture 9

1) Heparin is characterized by the following. EXCEPT?

a. It prevents blood coagulation in vivo only.
b. It is sulfate muco—polysaccharide.
c. It is formed by mast cells and basophils.
d. Its antidote is protamine sulphate.
e. Anti-thrombocytic.

Ans : a

2) Prevention of blood clotting by calcium removal include the following EXCEPT?

a. Heparin.
b. Na+ oxalate.
c. Na+ citrate.
d. EDTA.
e. K+ oxalate.

Ans : a

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