PATHOLOGY OF ANEMIA II

Date: Tuesday, November 6, 2018, 10:30 AM

Reading Assignment: Robbins Basic Pathology, 10th edition, Chapter #12 on “Hematopoietic and lymphoid systems”, Section on “Red cell disorders”

LECTURE OBJECTIVES

1. Define thalassemia syndromes as a group.

2. Explain why there are hematologic consequences of thalassemias.

3. Know which of the α-thalassemia genotypes are asymptomatic and which cause symptoms or death.


5. Describe the mutation responsible for paroxysmal nocturnal hemoglobinuria (PNH) and the resulting major clinical signs and symptoms of PNH.

6. Explain the mechanisms causing mechanical trauma to red blood cells and the common clinical situations in which this may occur.

7. Name the most common nutritional deficiencies responsible for anemia.

10. Detail the red cell changes and the clinical signs and symptoms in iron deficiency anemia.

11. Explain the mechanism underlying the enlargement, as well as the nuclear-cytoplasmic asynchrony, of proliferating cells in megaloblastic anemias.

12. Explain the causes of Vitamin B12 and folate deficiency, and the clinical findings in these disorders.

13. Discuss the pathogenesis of anemia of chronic disease, and describe how this entity can be distinguished from iron deficiency anemia.

14. Discuss the pathophysiology of aplastic anemia.

15. Describe the bone marrow and peripheral blood findings in aplastic anemia.