**SEPTEMBER 18, 2018**

9:40-10:25 Thrombocytopenia (Dr. Shinar)

Objectives:

1. Define thrombocytopenia in adults and know at what platelet count patients start to develop symptoms.
2. Describe the questions a physician should ask a patient about who is presenting with thrombocytopenia. List several diseases that cause thrombocytopenia in the following three categories: 1) decreased production, 2) increased sequestration, and 3) increased destruction.
3. Describe the first, most important lab test to order in the evaluation of a patient with thrombocytopenia.
4. Define factitious thrombocytopenia and understand how to diagnosis it and its significance.
5. Make a table and distinguish between the 4 causes of emergent thrombocytopenia in terms of clinical presentation, laboratory evaluation, and management. (ITP, HIT, TTP, and HELLP syndrome).

10:25 – 11:10 Sickle Cell Disease (Dr. Gomez)

Objectives:

1. Define criteria for diagnosing acute chest syndrome and describe its treatment.
2. Define the indications for transfusion in patients with sickle cell disease and explain the complications and treatments of transfusion common to patients with sickle cell disease
3. List the complications associated with sickle cell disease by organ system.
4. Describe the treatment of sickle cell disease pain crisis including optimal medication route and dosing, fluids, home medications, etc.

11:30 – 12:15 Anemia (Dr. Shinar)

Objectives:

1. Make a table and distinguish between the clinical presentation, the laboratory findings (such as RDW, peripheral smear, etc), and the associated conditions seen in each of the four causes of microcytic anemia: 1) iron deficiency, 2) globin synthesis (thalassemia), 3) porphyrin synthesis (sideroblastic anemia and lead poisoning), and 4) anemia of chronic disease.
2. Distinguish between iron deficiency anemia and anemia of chronic disease based on pre-test probability and iron studies including ferritin, transferrin, and percent saturation.
3. Understand how to correct a reticulocyte count to determine whether the bone marrow has adequate or inadequate response to an anemia.
4. Give a differential diagnosis for macrocytic anemia.
5. Know how to diagnose alpha-thalassemia trait and beta-thalassemia trait based on their clinical presentation and hemoglobin electrophoresis results.
6. Describe the evaluation for suspected hemolytic anemia and the appropriate work up for hemolysis that is suspected due to mechanical destruction, immune destruction, or intrinsic red cell defects (hereditary or acquired). Know the findings on peripheral blood smear that are seen in microangiopathic anemia and autoimmune hemolytic anemia.