HEMOSTASIS-COAGULATION CURRICULUM

Responsible Person: Dr. Lukman Tijani

REQUIRED rotation

Objective: The fellow should understand the basic mechanisms and components of normal hemostasis and thrombosis. This should include a practical knowledge of the function and interactions of procoagulant and anticoagulant proteins, cellular contributions and interactions between these components as well as with vascular endothelium.

Goals:

- The fellow should demonstrate an understanding of bleeding disorders, such as von Willebrand's disease, hemophilia's A and B, and other inherited factor deficiency states.
- The fellow should demonstrate a comprehensive working knowledge and practical competency for recognizing and diagnosing acquired bleeding disorders. This should include recognizing the effects of systemic diseases (e.g. liver disease, renal failure) on hemostasis, disorders caused by the acquisition of coagulation factor antibodies (inhibitors), platelet disorders (see above), and effects of medicinals.
- The fellow should understand the role of vascular abnormalities in the etiology of specific bleeding disorders.
- The fellow should demonstrate practical competency using various diagnostic tools, and
 interpreting their results, in patients with bleeding disorders, including platelet function
 studies, bleeding time, coagulation factor assays, and coagulation factor inhibitor screens
 and assays.
- The fellow should demonstrate a comprehensive working knowledge and practical competency of the basic molecular pathophysiologic mechanisms, diagnosis and therapy of diseases that lead to thrombosis.
- The fellow should be familiar with methods for prophylaxis, diagnosis, and treatment of venous thrombosis, including the proper use of anticoagulant therapies.
- The fellow should be familiar with the indication, approaches to and limitations of genetic testing to assess risk factors for thrombosis.
- The fellow should demonstrate a comprehensive working knowledge of the clinical presentation, pathogenic mechanism, diagnosis and management of heparin-induced thrombocytopenia and antiphospholipid syndrome.
- The fellow should demonstrate practical competency with the use of the various classes of antithrombotics, anticoagulants, various factor replacement products, inhibitor "bypass"

products, antifibrinolytic agents, and the role of blood products for the management of bleeding disorders.

Activities

- Fellows will rotate in coagulation clinic to learn diagnosis and treatment management of patients with bleeding and thrombotic disorders.
- Fellows will attend hematology didactics, journal clubs and meetings.
- Fellows will be expected to do reading assignments and projects in hemostasis and coagulation.

References

- ASH SAP
- Williams Hematology
- Blood
- New England Journal of Medicine
- Journal of Clinical Oncology
- Harrison Hematology
- Formal presentations on case reviews Fridays at 12:15 p.m. heme-path conferences, to be evaluated by members of the audience and to be placed in portfolio upon completion of conference.
- Semi-annual examination will have questions related to information obtained during this rotation.