DESCRIPTIONS FOR MED 3 ROTATIONS

Hematology A2 and A3S

A. General

Clinical clerks will be expected to develop a knowledge base in the pathophysiology, diagnosis and treatment of hematological diseases.

B. Specific Knowledge

1. Normal hematopoiesis and regulatory cytokines
2. Normal coagulation and hemostatic pathways
3. Normal immune system
4. How to investigate and manage the following conditions and have an understanding of the underlying pathophysiology of representative disorders:
   • anemia, erythrocytosis
   • thrombocytopenia, thrombocytosis
   • leukopenia, leukocytosis
   • hematological malignancies including plasma cell dyscrasias, myeloproliferative disorders, myelodysplastic disorders, chronic and acute leukemia, lymphomas and lymphoproliferative disorders
   • venous and arterial thromboembolic disease and hypercoaguable states
   • coagulopathies and hemostatic disorders both congenital and acquired
   • bone marrow transplantation including indications, procedure and complications (eg. graft versus host disease)
   • emergency situations and hematological disease including hypercalcemia, cord compression, hyperviscosity and febrile neutropenia
5. Principles of use and side effects of chemotherapeutic agents used for hematological malignancies

6. The components available for blood product transfusion including indications and dosage and an understanding of transfusion-related complications

7. The basic principles and indications for plasmapheresis

C. Specific Skills

Clinical clerks will be expected to integrate peripheral blood smears and bone marrow aspirates; attain skills for procedures including bone marrow aspirate, bone marrow biopsies, care of indwelling venous catheters.