

Hematology rotation for Internal Medicine residents at St Paul's Hospital

OVERVIEW AND ROTATION-SPECIFIC GOALS AND OBJECTIVES

Overview:

The providence hematology provides a wide range of inpatients, day care and outpatients' services for patients with haematological diseases. It also works closely with other departments in the hospital and provides consultative hematology services.

The aim of this summary is to introduce you to the providence hematology group activities, so you can maximize your learning opportunities and be aware of your responsibilities.

1. Inpatients: patients with haematological malignancies who need intensive chemotherapy are treated as inpatients. Examples of those are patients with acute myeloid leukemia and acute lymphoblastic leukemia receiving induction or salvage therapy. Other patients who we normally treat as outpatients, such as patients with lymphoma, myeloma may be treated as inpatients if they have co-morbidities. Although almost all inpatients are also signed under CTU, haematologists provide most of their care and manage the complications that may arise from their treatment or disease. The chemotherapy protocols are posted on the hospital system (sunrise under forms) and need to be co-signed by the hematologist before they are sent to the pharmacy. You should familiarize yourself with the chemotherapy protocol and the medications. More information about chemotherapy medications can be found in the BC Cancer Agency website (www.bccancer.bc.ca) under the cancer drug manual. Those patients need to be seen and examined daily and a follow up note must be written in their charts. Any emerging issues should be brought to the staff physician's attention.
2. Consultative hematology: On average we receive two requests for consultation per day. All consultation must be seen within 24 hours. The resident should take a full history, do a full physical examination and present the case to the staff person on call. Due to the variety of consultations that we see, this is considered to be a good exercise for the residents and a significant learning opportunity. It is strongly advisable that you read about your patient's condition before you discuss the case with the staff physician. A comprehensive, dictated consultation note must be done by the resident. The

consulting physician, requested investigations and plan of management must be clearly stated in the note.

3. Consultations from the emergency department after 5 pm: Patients known to the hematology service at SPH who arrive at the emergency department after 5 pm with an acute haematological problem must be seen by the resident and the case discussed with the staff person on call. Patients who are not known to the haematology service at SPH are discussed between the emergency doctor and the haematologist who then decide on the course of action.
4. Medical short stay unit (MSSU) on 8D: Patients with various haematological diseases are managed as outpatients in the medical short stay unit. They receive chemotherapy, blood products, IV fluids and antibiotics, Hickman line care etc. The medical short stay unit is open from 7am – 7 pm and closed over weekends and public holidays. Bone marrow procedures for outpatients are done in the MSSU. Those patients are managed by their responsible hematologist.
5. Out-patients clinics: these are run at the providence hematology office at 440-1144 Burrard St. We manage a wide spectrum of haematological conditions in the outpatients department. These include patients with benign and malignant haematological diseases. Drs Leger, Leitch and Ramadan have new patient's clinic on every Tuesday afternoon (starts at 1pm) where maximum 2 residents will have the opportunity to see one new patient.
6. Procedures:
 - a. Bone marrow aspirate and biopsy: These are booked with the haematology lab and done in the morning at the bedside for the inpatients and in the MSSU for the outpatients. It is either done by the hematologist or the hematopathologist. The residents should have an opportunity to observe and learn how to do this procedure.
 - b. Lumbar puncture and intra-thecal chemotherapy: This either done by the hematologist or under fluoroscopy in the X-ray department. The chemotherapy drug needs to be ordered from the pharmacy and a CBC and coagulation screen checked on the day of the procedure. If the procedure is done on the ward, a lumbar puncture tray needs to be ordered as well. Although the resident can observe and learn how to do the lumbar puncture, the intra-thecal chemotherapy must be administered by the staff physician.

Rotation-specific goals and objectives:

At the end of your rotation you should have acquired skills and knowledge in haematology which will enhance your capabilities as an internist in the future. The following educational objectives should be achieved:

1. Develop diagnostic skills and an evidence-based approach to patients with haematological problems.
2. Develop skills in history taking and physical examination of patients with haematological diseases.
3. Develop skills necessary for the development of an integrated differential diagnosis for patients with hematological problems.
4. Use of evidence-based medicine in hematology and become familiar with the mainstream hematological journals.
5. Develop procedure skills and learn the indications of and how to do a bone marrow aspirate and biopsy.
6. Develop communication skills with patients and families with hematological conditions.
7. Develop discharge skills and how to arrange for follow up for patients with hematological diseases.
8. Develop presentation skills for patients with hematological diseases.
9. Develop skills of interactions with other consulting physicians asking for haematological advice.
10. Develop skills to manage very sick patients with haematological malignancies.
11. Develop basic morphology skills in the hematology lab.
12. Develop skills in using the hematology lab effectively and appropriately.