Division of Hematology and Hematologic Malignancies

Adult Hematology Residency Training Program

Goals & Objectives
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Clinical Hematology PLC

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Rotation Supervisor: Dr. Johan Lategan
PLC Hematology Rotation Coordinator (Administrative): Ms. Anne Merzetti
Peter Lougheed Centre Community Hematology Practice Rotation

The Hematology Resident participates in a 2 block Community Hematology practice rotation based out of the Peter Lougheed Centre and supervised by both private practice and major clinical university appointed clinical hematologists. The rotation allows the more senior hematology resident to experience high volume clinical care of patients with hematologic disease in both the ambulatory and acute care setting. The rotation is intended to give the more senior hematology trainee experience in busy community based practice principally within a large urban community.

Rotation Coordinators:
Drs A Daly and J Lategan

Location:
Peter Lougheed Centre, NU 51, Specialty Ambulatory Clinic area,

Preceptors:
Drs A Daly, J Lategan, M Wong, Lesley Street, Jiri Slaby

Preceptors’ responsibilities include:
1. Direct supervision of resident based patient care on both the inpatient service and hospital consults. The Preceptor should gauge the level of competence of the resident and allow graduated responsibility for care and graduated degree of direct supervision of clinical decision making on a day to day basis, as described above.

2. Ongoing follow up of consult and inpatient cases according to the standards of professional practice. The preceptor is responsible for ensuring that appropriate patient follow up is arranged, either by themselves or through the longitudinal resident’s ambulatory clinics where appropriate. It is not the intent that long term follow up of all cases cared for by the resident on the inpatient rotations necessarily are followed in the resident ambulatory clinic. Cases that provide ongoing educational value are appropriate for transfer to the resident clinic after discussion with the resident and the longitudinal clinic preceptor.

3. Faculty are required to make daily rounds on call on weekends and be immediately available to support resident needs by pager

4. Resident teaching and direct observation of resident performance in the form of bedside clinical rounds and consultation review.

5. All teaching faculty are required to contribute to educational rounds covering the topics outlined in the curriculum.

6. Direct patient care coverage to allow the resident to attend to their mandatory educational and outpatient clinic responsibilities.
7. Verbal and written feedback on resident performance.

**Resident Responsibilities**

1. Attendance to assigned responsibilities on PLC inpatient hematology unit (NU51)

2. Attendance to Inpatient consultative duties as assigned.

3. Attendance when possible in ambulatory clinics in both the PLC and when available, private practice offices.

4. On call duties to the Hematology service at the Peter Lougheed centre. The resident is NOT expected to cover on call duties at the Foothills medical centre during this rotation.

5. Attendance at all longitudinal Hematology Fellow clinics

6. Attendance at all Educational Sessions (if necessary arrangements may be made ahead of time for telehealth transmission of Weekly Hematology Rounds, otherwise it is the responsibility of the Rotation Preceptors to allow the resident adequate time to travel to attend Educational or Fellow clinic sessions.)

7. Admission, care planning, daily care and discharge planning for Hematology patients on the inpatient service. The resident is responsible for informing and reviewing with the attending hematologist all new admissions or major developments in patient status.

8. Attendance at clinical care rounds with the preceptor of the week (2-5 days/week depending on the resident’s level of expertise and responsibility).

9. Supervision and teaching of all more junior resident/clerk staff.

10. First call and assessment of all consultation requests from other clinical services. The resident may function as a supervisor/second evaluator for consultations that are seen initially by junior residents, clinical clerks or medical students prior to review with the attending Hematologists.

**MEDICAL EXPERT/CLINICAL DECISION MAKER**

1. Develop evidence-based approaches to the investigation and management of patients presenting with
   - Anemia (microcytic, normocytic, macrocytic), thrombocytopenia, neutropenia, pancytopenia, aplastic anemia
   - Febrile neutropenia
   - Splenomegaly, lymphadenopathy
• Leukocytosis (neutrophilia, eosinophilia, basophilia, monocytosis, lymphocytosis), thrombocytosis, erythrocytosis
• Bleeding, bruising
• Complications of blood product transfusion
• Venous thrombosis
• Abnormal coagulation tests in the asymptomatic patient

2. Develop evidence based management strategies for the following disorders:
• Aplastic anemia (congenital, acquired, pure red cell aplasia), non-neoplastic neutropenia and thrombocytopenia
• Nutritional anemias, anemia of chronic disease and anemia of renal failure
• Hemolytic anemia
• Hemoglobinopathies (Sickle Cell and related disorders), thalassemias
• Immune thrombocytopenic purpura
• Myelodysplastic syndromes
• Plasma cell dyscrasias
• Lymphoproliferative disorders including nonHodgkin’s lymphomas and Hodgkin’s lymphomas
• Acute leukemias
• Less common and unusual neoplastic disorders (e.g. hypereosinophilic syndrome, mast cell disease, Langerhans cell Histiocytosis)
• Acquired bleeding disorders (iatrogenic, acquired inhibitors of coagulation, DIC, HUS, TTP, HELLP etc)
• Hemophilia and Von Willebrand Disease
• Hereditary and Acquired thrombophilias

3. Synthesize relevant information and effectively discuss the above disorders in terms of the relevant laboratory, pathophysiological, clinical, prognostic, treatment related and supportive care features.

4. Demonstrate proficiency in eliciting a relevant, concise and accurate history and performance of a thorough and complete physical examination in the assessment of the above disorders and problems.

5. Integrate the information from history, physical exam, diagnostic and procedural investigations to formulate a management plan for the patient’s hematologic problem/disorder
6. Demonstrate the ability to effectively integrate the management of hematologic problems in patients with complex multisystem illnesses

7. Provide well documented assessments and recommendations in written and/or verbal form in response to requests from other health care providers.

8. Demonstrate proficiency (including obtaining informed consent, knowledge of technical skills, indications, adverse effects/complications, alternative procedures) in the following procedures:
   • Bone marrow biopsy and aspiration
   • Lumbar puncture
   • Intrathecal chemotherapy administration

9. Demonstrate knowledge necessary for the supervision and appropriate application (including the obtaining of informed consent) of the following procedures:
   • Transfusion of blood and blood products

COMMUNICATOR

1. Elicit relevant information with respect to the patient’s hematologic problems and medical history, indications for treatment and admission to hospital. The resident will be able to provide a concise and accurate verbal and written summary of the patient’s history and physical examination and records of daily care.

2. Gather information about the patient’s beliefs, concerns and expectations about their hematologic problem, considering the impact of factors such as age, gender, ethnic, cultural and socioeconomic background and spiritual values.

3. Deliver information to the patient and family regarding investigations, diagnosis, prognosis, treatment options, complications, and impact on quality of life in a manner which is understandable, encourages discussion and promotes patient’s participation in the decision making process.

4. Establish proficiency in the discussion of care goals and end of life decision making with patients, families, caregivers and medical caregivers.

5. Participate in the patient care and educational rounds and understand the importance of cooperation and communication among the varied and numerous health care professionals involved in the care of patients with serious hematological problems/disorders.
6. The resident will demonstrate effective consultative skills by providing well documented assessments and recommendations in response to requests from other health care providers.

**COLLABORATOR**

1. Participate in the weekly care planning rounds with the interdisciplinary team members to develop comprehensive care planning for hematology ambulatory, inpatients and consultation patients.

2. Coordinate specialist consultation referrals where appropriate.

3. Effectively communicate with the members of the interdisciplinary team in the resolution of conflicts, provision of feedback and where appropriate be able to assume a leadership role.

4. Participate in the coordination of transitional care from inpatient to outpatient facilities including notification of the appropriate interdisciplinary team members, appointment planning and home care support.

5. Effectively communicate and collaborate with the care teams in the patient’s home city when providing care of patients from outside of Calgary.

**MANAGER**

1. Effectively utilize the information technology available to optimize patient care (e.g. Electronic patient records, Tom Baker Cancer Centre, accessing learning materials, Quality Improvement and Patient Safety reporting systems)

2. Be aware of and utilize as appropriate, the Quality Improvement and Patient Safety reporting systems within the Calgary Health Region.

3. Demonstrate the ability to triage investigations and management of patient problems according to the level of acuity and delegate responsibility where appropriate.

4. Effectively manage time to balance the responsibilities of inpatient care, consultation requests, attendance at regular outpatient clinics and educational responsibilities.

**HEALTH ADVOCATE**

1. Demonstrate an understanding of how the basic determinants of health will affect outcome of patients with hematologic disease e.g. employment status, social support systems, educational level, community health support systems, nutrition, carcinogen / toxic agent exposure, genetic disease.
2. Identify those patients groups that are at risk of hematologic disease and advocate preventive strategies to keep patients from requiring repeat hospital admission (e.g., community health support, immunization or other prophylactic treatment, appropriate follow-up).

**SCHOLAR**

1. Develop and implement a personal continuing education strategy with respect to the changing indications, treatment modalities, improvements in care and treatment of complications of hematologic disease.

2. Utilize the principles of evidence based medicine and critical appraisal in the evaluation of literature pertaining to the diagnosis and treatment of hematological disease.

3. Participate or facilitate where possible in ongoing clinical trials assessing diagnosis and treatment of hematologic disease.

4. Effectively and proactively organize and implement teaching of junior residents and clinical clerks when they are participating in the hematology inpatient and consultation rotations.

5. The resident will attend and participate in the presentation of clinical and educational teaching rounds on the hematology service.

**PROFESSIONAL**

1. Deliver the highest quality care with integrity, honesty and compassion and display professional attitudes and behaviors in the care of patients with hematologic disease. This will include an awareness of racial cultural and societal issues that impact on the delivery of care.

2. Integrate ethical codes of practice when dealing with ethical issues related to hematological disease e.g. end of life care decision making, informed consent, conflict of interest, research ethics, resource allocation, disclosure of harm.

3. Demonstrate the ability to recognize, analyze and develop strategies for dealing with unprofessional behaviors in clinical practice.