



Division of Hematology and Hematologic Malignancies

Adult Hematology Residency Training Program

General Hematology Clinics II

Goals & Objectives

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Program Director:

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Adult Hematology Residency Training Program General Hematology Clinics II

Hematology practice encompasses the diagnosis and management of a broad range of non-malignant diseases including hemoglobinopathies and thalassemias, immune deficiencies, cytopenias, rare blood disorders, thrombosis and bleeding disorders, disorders of iron metabolism, and many others. This rotation is designed to provide maximal exposure to a variety of benign hematology disorders. This is one of two rotations consisting of general hematologic clinics, and the emphasis on this rotation is placed on outpatient exposure to the diagnosis and management of patients with hemostatic and thrombotic disorders. In addition to a variety of general hematology clinics, this rotation will also include participation in comprehensive clinics devoted to the initial evaluation and management of adult patients with disorders of hemostasis.

There are weekly thrombosis/hemostasis case based preceptor tutorial sessions to maximize the educational component of this rotation.

Location

Primary site - Foothills Medical Centre

Other possible sites – South Health Campus

Rotation Coordinators

Dr. Natalia Rydz and Dr. Mona Shafey

Resident Responsibilities

- Attendance at all assigned clinics.
- On call availability to Bleeding Disorders Clinic for evaluation of walk-in patients during clinic hours, and as well as review of urgent hemostasis and thrombosis consults when possible (residents must notify the clinic of their availability)
- Patient assessment, diagnostic procedures, coordination of diagnostic investigations, follow-up care planning
- Infusional therapy supervision as required
- Review of case-based tutorial sessions with preceptor on weekly basis
- Attendance at all mandatory educational sessions, weekly and monthly rounds.

Objectives

MEDICAL EXPERT

- Demonstrate competence in the clinical skills of history taking, physical exam and diagnosis and the synthesis of this information into the formulation of accurate problem based management plans for pediatric and adult patients referred for consultation.
- Demonstrate an in depth knowledge and understanding of the following :
 - Normal hemostasis (platelets, coagulation factors, endothelium) and its control (blood flow, fibrinolysis, natural protease inhibitors, protein C/S system, prostacyclin system that involves plasma components and endothelium) mechanisms
 - Disturbances/abnormalities of the dynamic balance of hemostasis and its control mechanisms and their impact in bleeding and/or thrombophilic tendencies.
 - Physiology, structure and function of coagulation factors and platelets.
 - Pathophysiology, genetics and clinical presentations of congenital factor deficiency states (hemophilias, von Willebrand disease, rare factor deficiency) and states of factor dysfunction (ie dysfibrinogenemia)
 - Pathophysiology and clinical presentations of quantitative and qualitative, congenital and acquired platelet disorders
 - Pathophysiology and clinical presentations of acquired disorders of hemostasis (e.g. DIC, fibrinolytic states, anticoagulants, etc.)
 - Pathophysiology and clinical presentations of congenital and acquired disorders of thrombosis
- Prevention, Diagnosis and Clinical Management of the Following:
 - Deep Vein thrombosis and pulmonary embolism
 - Diagnostic methodologies, clinical prediction rules
 - Limitations of diagnostic methods in special populations (e.g. pregnant women)
 - Diagnosis of recurrence
 - Risk stratification and preventative strategies
 - Recognition and investigation of patients with prothrombotic conditions
 - Interpretation of laboratory assays of coagulation and hemostasis as appropriate to the clinical setting
 - Treatment of thrombotic events

- Anticoagulant pharmacology and therapy including appropriate use and risks involved with new and older anticoagulants and antiplatelet drugs
 - Thrombolytic pharmacology and therapy
 - Treatment of special populations (pregnant women, children and infants)
 - Appropriate inferior vena cava filter use
 - Prevention of and treatment of post phlebitic syndrome
- Hemophilia A and B, Von Willebrand Disease and rare factor deficiencies
 - Diagnosis
 - Comprehensive chronic disease management through a multidisciplinary approach
 - Genetic counselling
 - Pregnancy management and prenatal testing
 - Peri-procedure management of bleeding disorders
 - Management of women with bleeding disorders, including pregnancy
- Congenital Quantitative platelet disorders
- Congenital Qualitative platelet disorders

COMMUNICATOR

- Develop appropriate rapport and trust with patients and families, and elicit relevant information with respect to the patient's medical history, hemostatic/thrombotic problems, and indications for treatment.
- Demonstrate relevant, clear and complete verbal and written communications with other health care professionals in a timely manner.
- Effectively gather information about the patient's beliefs, concerns and expectations about their bleeding or thrombotic problem and consider the impact of factors such as the patient's age, gender ethnic, cultural and socioeconomic background and spiritual values.
- Demonstrate an understanding of the importance of open discussion of diagnoses, prenatal and family counselling, investigative, and treatment options with patients and their families; promote patient participation in decision-making and facilitate a family meeting when appropriate

- Deliver information to the patient and family regarding investigations, diagnosis, prognosis, treatment options, complications, impact on quality of life, and end of life decision making in an understandable manner which encourages discussion and promotes patient participation
- Develop strategies for dealing with difficult patient communication situations (e.g. delivery of bad news, anger, frustration, confusion or ethnocultural background different than the resident's)
- Participate in the comprehensive clinic care rounds and understand the importance of cooperation and communication among the varied and numerous health care professionals involved in the care of patients with bleeding and thrombotic disorders

COLLABORATOR

- Identify and describe the roles, expertise and limitations of all members of the patient care team; specialist physicians, primary care physicians, nursing staff, social work, geneticists etc
- Participate in and contribute to the hematology education series and clinical case reviews with division members
- Describe how regional, provincial and national health care governance influences patient care e.g. issues around specialist availability, waiting lists, accessibility to outpatient diagnostic modalities and specialized outpatient management facilities
- Participate in the care planning rounds with the interdisciplinary team members to develop comprehensive care planning for bleeding disorder patients.
- 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.
- 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.
- Participate in the care of patients from outside of the Calgary region, communicate and collaborate with the care teams in the patient's home city.
- Collaborate with and participate in ongoing clinical trials involving bleeding disorder and thrombotic disorder patients.

LEADER

- Understand how to function effectively in a multidisciplinary comprehensive chronic care ambulatory clinic setting.
- Oversee patient care in the ambulatory setting and manage transitions to acute care settings as well as delegation to other health care providers where appropriate.
- Effectively utilize the information technology available to optimize patient care (e.g. electronic patient records, patient data bases, accessing learning materials)
- The resident will be able to manage outpatient problems according to the level of acuity and triage investigation and delegate responsibility where appropriate.
- The resident will demonstrate effective time management skills in order to balance the responsibilities of patient care, consultation requests, attendance at regular outpatient clinics and educational responsibilities.
- Describe the structure and function of the health care system as it relates to haemophilia care in Canada, and challenges regarding just distribution of resources worldwide

PROFESSIONAL

- Demonstrate honesty, integrity, compassion, respect and altruism when providing care to adult and pediatric patients
- Appreciate his or her limitations in expertise in the care of patients with uncommon/rare bleeding and thrombotic disorders and appropriately access expert support.
- Demonstrate an awareness of racial, cultural and societal issues that impact on the delivery of care and modify care to address these issues.
- Display ethical codes of practice when dealing with ethical issues related to hematologic disease e.g. end of life care, consent, conflict of interest, research ethics, and resource allocation.

SCHOLAR

- Identify, retrieve and critically appraise the medical literature pertinent to the basic science, diagnosis and treatment of adult and pediatric patients with hemostatic and thrombotic disorders.
- Provide education to health care professionals, students, junior residents, patients and families regarding hemostatic and thrombotic disorders.

- Critically apply results of basic or clinical hematologic research and participate in ongoing clinical trials when opportunity is available.
- Develop and implement a personal continuing education strategy with respect to the changing care of patients with of hemostatic and thrombotic disorders.
- Attend and participate in the presentation of clinical and educational teaching rounds on the hematology service.

HEALTH ADVOCATE

- Demonstrate an understanding of how the basic determinants of health will affect outcome of patients with hemostatic and thrombotic disease e.g. employment status, social support systems, educational level, community health support systems, nutrition, genetic disease
- Advocate preventative strategies in the long-term care of adult patients with chronic hemostatic and thrombotic disorders and the transition from pediatric to adult based care. For example:
 - prophylactic treatment of hemostatic and thrombotic defects,
 - prevention and support of disease/treatment mediated complications
 - safe-sex principles
 - smoking cessation, diet and exercise
 - prevention of transmissible disease including immunization programs,
 - screening for transmissible disease (e.g. Hepatitis B, C, HIV)
 - importance of regular follow-up and compliance with chronic care program
 - prenatal counselling and testing
- Advocate preventive strategies to patients at risk of hemostatic and thrombotic disease (e.g. prenatal diagnosis, family counselling, appropriate prophylactic treatment and follow-up, medication management and risks).
- Identify patients at risk of hemostatic/thrombotic 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, supportive care).