B. General Learning Objectives

1. Medical Expert

As Medical Experts, students will achieve the defined body of knowledge, skills, and attitudes necessary for the recognition and understanding of the management of patients with diseases which may be treated by surgeons. The Medical Expert role requires integration of the other CanMEDS roles, applied to the provision of patient-centered care.

1.1. Demonstrate knowledge and skills for the diagnosis and treatment of surgical diseases and to develop the ability to apply this knowledge for the solution of problems presented by the patient. This includes the selection and interpretation of laboratory and other scientific data in the solution of clinical problems. (see 1.4, 1.5.1 and 1.6)

1.2. Demonstrate responsible judgment and skills for the benefit of the patient and his/her family.

1.3. Demonstrate common technical skills important in surgical care.

1.4. The student should be proficient with the following clinical skills: History & physical; Case presentation; Problem prioritization; Differential diagnosis; Plan of investigation; Treatment and management; Pre-op assessment; Pre-op orders; Operative note; Daily progress note; Consultation procedures; Operating room conduct; Assessment of wound healing

1.5. Essential Clinical Presentations

1.5.1. The following are a list of patient problems or clinical presentations which are essential to cover, either as clinical exposures or in discussion during the Friday Teaching Day seminars. The student must be able to discuss the presentation, diagnosis, management, complications, follow-up and prognosis of: Acute abdominal pain; Fracture; Breast lump; Dysuria/hematuria; Flank pain; GI bleeding; Groin swelling; Head injury; Jaundice; Leg claudication; Multiple trauma; Skin - thermal burn; surgical treatment of infection.

1.5.2 Essential Procedural Skills

The student should have observed or acquired the following skills and, by the end of the rotation, should be able to demonstrate the following procedural skills:

- OR conduct and aseptic technique; Incision and drainage of abscess or wound; Knot-tying; Wound closure and simple suturing; Nasogastric tube placement; Urinary catheter placement

1.6. Other Surgical Clinical Presentations

By the nature of the Surgery clerkship, students will be rotating in two or three surgical disciplines, but will be responsible for learning in other disciplines. The following is a list of surgical clinical presentations derived from the Medical Council of Canada objectives (http://www.mcc.ca). By the end of the clerkship year, students should have a working knowledge of these presentations (change to the student must be able to discuss the presentation, diagnosis, management, complications, follow-up and prognosis of), the disease processes involved and their management. The disease processes involved in each problem have not been listed. Many of these are covered in the Friday Teaching Day seminars and all of the topics are covered in the recommended reading. For completeness, the essential clinical presentations are re-listed below, marked with (*).
1.6.1. Gastrointestinal: * Acute abdominal pain; * Vomiting blood (hematemesis); * Rectal bleeding (hematochezia, melena); Abdominal mass; * Jaundice; Chronic abdominal pain; * Abdominal distension; * Vomiting; Altered bowel habit; Rectal pain; Difficulty swallowing; Heartburn (gastroesophageal reflux)
1.6.2. Nutritional: Malnourishment; Obesity
1.6.3. Breast: * Lump in breast; Nipple discharge; Painful breast
1.6.4. Skin: * Burns; Injury, cuts, abrasions; Infection; Pigmented lesion; Lump; Ulcer; Nail problems
1.6.5. Groin and Genitalia: * Swellings; Pain; 1
1.6.6. Chest: Hemoptysis; Dyspnea; Cough; Pain; Lung nodules
1.6.7. Peripheral Vascular: Swollen limb; Painful limb/digits; Pulsating mass; * Claudication; Fainting spells (TIAs); Leg ulcers
1.6.8. Heart: Chest pain; Irregular pulse; Cyanosis; Fainting spells;
1.6.9. Genitourinary: * Hematuria; Pneumaturia; * Dysuria; * Flank pain; * Obstruction (acute, chronic); Fertility problems; Urinary frequency; Urinary incontinence
1.6.10. Head & Neck: Neck lumps; Draining sinus; Nasal bleeding; Stridor; Hoarseness; Dizziness
1.6.11. Nervous System: Headache; Back pain; Paralysis; Loss of consciousness; Paresthesia; Limb pain; Congenital abnormalities
1.6.12. Musculoskeletal: * Fractures; Dislocations; Painful/swollen joints; Deformed limb; Bone pain; Back/neck pain
1.6.13. Pediatrics: * Abdominal pain; * Vomiting; * Jaundice; Abdominal mass; Bowel function abnormalities; * Rectal bleeding; Neck masses; Stridor; * Hernia and "lumps and bumps"; Cyanosis; Management of surgical child
1.6.14. Trauma: * Head injury; * Chest trauma (blunt/penetrating); * Abdominal trauma (blunt/penetrating); * Multiple trauma; * Hemorrhagic shock; Human/animal/insect bite; * Hand injury; * Facial trauma; * Vascular trauma; * Genitourinary trauma
1.6.15. High Risk Patients: Preoperative assessment; Intensive care
1.6.16. General Topics
These represent states and principles of surgery frequently manifested in many of the above patient problems:
· Shock & resuscitation; Wound healing & inflammation; Metabolic & physiologic response to injury; Post-operative complication; Hemostasis, surgical bleeding & transfusion medicine; * Management of multiple traumas & trauma resuscitation; Transplantation
1.6.17. Technical Skills
The student should be proficient with the following skills:
· Gowning & gloving, including closed gloving; Aseptic dressing change; Wound care - clean & "dirty"; Sterile technique; Wound closure technique; Shortening or removal of surgical drains; Removal of sutures & staples; Local anesthesia technique
· Other skills as dictated by the surgery selective rotation.

2. Communicator
As Communicators, students will facilitate the doctor-patient relationship.
· Establish rapport, trust and a therapeutic relationship with patients and families.
· Listen effectively.
· Elicit relevant information and perspectives of patients, families, and the health care team.
· Convey relevant information and explanations to patients, families and the health care team.
· Convey effective oral and written information about a medical encounter.
· Maintain clear, accurate, appropriate, and timely records of clinical encounters and operative procedures
· Address challenging communication issues effectively
· Obtain informed consent
· Deliver bad news
· Disclose adverse events
· Discuss end-of-life care
· Discuss organ donation
· Address anger, confusion and misunderstanding using a patient-centred approach

3. Collaborator
As Collaborators, students will work effectively within the surgical team to achieve optimal patient care.
· Demonstrate a team approach to health care
· Participate effectively in an inter-professional and interdisciplinary health care team.
· Recognize and respect the diversity of roles, responsibilities, and competences of other health professionals in the management of the surgical patient.
· Work with others to assess, plan, provide, and integrate care of the surgical patient.

4. Manager
As Managers, students will participate in the activities of the surgical service, making decisions, allocating resources, and contributing to the effectiveness of the health care team.
· Employ information technology appropriately for patient care.
· Allocate finite health care resources appropriately

5. Health Advocate
As Health Advocates, students will responsibly use their expertise and influence to advance the health and well-being of individual patients, communities and populations.
· Concern for the best interest of patients
· Identifying health needs of individual patients, and advocate for the patient in cases where appropriate
· Promote and participate in patient safety

6. Scholar
As Scholars, students will demonstrate a lifelong commitment to learning.
· Demonstrate the ability for continuing self learning
· Discuss the principles of surgery and the application of basic sciences to surgical treatment.
· Demonstrate appropriate presentation skills, including formal and informal presentations.
· Critically evaluate medical information and its sources and apply this appropriately to clinical decisions.
· Critically appraise the evidence in order to address a clinical question.
· Integrate critical appraisal conclusions into clinical care.

7. Professional
As Professionals, students are committed to health and well-being of individuals through ethical practice, profession-led regulation and high personal standards of behavior.
· Exhibit professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.
· Demonstrate a commitment to delivering the highest quality care.
· Recognize and respond appropriately to ethical issues encountered in practice.
· Recognize and respect patient confidentiality, privacy and autonomy.
· Participation in peer review
· Manage conflicts of interest
· Maintain appropriate relations with patients.
· Demonstrate awareness of industry influence on medical training and practice
· Recognition of personal and clinical limit

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