

Goals and Objectives: International Surgery Rotation

Preamble: The practice of surgery around the world varies from place to place, depending on the setting, the culture, and the resources that are available. Yet there are many similarities, as well.

Aims:

- To gain exposure to the practice of medicine outside of North America.
- To apply surgical skills and medical knowledge in a low-resource, cross-cultural setting.
- To improve cross-cultural communication skills, which can also be used for the care of patients in Canada.
- To have an opportunity to explore international surgery as a career, or as a part of one's career

Medical Expert/Clinical Decision Maker

- Knowledge: Basic science and anatomy
 - Demonstrate knowledge of basic science and physiology, and an ability to apply this knowledge to unfamiliar clinical problems.
 - Demonstrate working knowledge of whole body surgical anatomy, in particular, the GI tract and biliary system, urinary tract, gynecologic organs, neck, and musculoskeletal anatomy.
- Knowledge: General clinical
 - Perform thorough and thoughtful histories and physical examinations.
 - Order and interpret investigations that are available and appropriate to the setting.
 - Perform appropriate preoperative patient assessment and preparation.
- Knowledge: Specific clinical problems

A wide range of problems will be seen on an international surgery rotation, and it is impossible to know about every condition that will be encountered. However, knowledge of common conditions should include:

General Surgery: Diagnosis and management of:

- Appendicitis, cholelithiasis/cholecystitis, obstructive jaundice, hernias, peptic ulcer disease and its complications, pancreatitis
- Typhoid enteritis and typhoid perforations

- Liver abscess and hydatid disease

OB/GYN

- Postpartum hemorrhage – management algorithm, in particular surgical options
- Diagnosis and management of ectopic pregnancy, molar pregnancy
- Caesarean section – indications, techniques, troubleshooting.

Trauma

- Orthopedic trauma – open and closed fractures
- Trauma laparotomy – indications and approach
- Head injury – assessment, resuscitation, indications for surgery and surgical technique.

Pediatric surgery

- Undescended testes
- Hernias/hydroceles
- Neonatal problems (e.g. imperforate anus) – emergency management

Plastic Surgery

- Burns – initial resuscitation, assessment of degree and extent of burns, issues in management (pain control, nutrition, contracture prevention), and indications and techniques for surgery.
- Hand injuries and infections – a thorough knowledge of anatomy is needed.
- Complex wounds

ENT/Head and Neck

- Thyroid disease - especially goiter and thyroid nodules
- Neck masses – approach, diagnosis, management

Urology

- BPH – diagnosis, indications for surgery, management of acute urinary retention.
- Urethral injuries, urinary obstruction – recognition and safe management
- Renal stone disease – diagnosis, management options.

Oncology

- While malignant disease is less commonly seen in the international setting, it does still exist. Screening is almost nonexistent in most places. Knowledge about diagnosis,

assessment, and formulating a treatment plan is essential. In some hospitals, the surgeon may also be responsible for administering chemotherapy. In others, referral may be possible.

- Knowledge: Technical

- General Surgery

- Inguinal hernia – tissue repair
 - Bowel resection and handsewn anastomosis
 - Open Surgery (e.g. appendectomy, cholecystectomy)
 - Trauma Laparotomy
 - Drainage of abscesses, debridement of wounds
 - Pediatric hernia repair
 - Endoscopy (especially Upper GI endoscopy)

- OB/GYN

- C-section
 - D+C

- Plastic Surgery

- Skin graft
 - Tendon repair

- Other Specialties

- Suprapubic catheterization
 - Cystoscopy
 - Amputations
 - Fracture/dislocation reduction, basic care for open fractures
 - Anaesthesia (in some hospitals)

- Other cases a resident may be exposed to and should develop a working knowledge of:

- Open prostatectomy (usually for benign disease)
 - Nephrectomy, pyelolithotomy, ureterolithotomy
 - Hysterectomy
 - Thyroidectomy, excision of neck masses
 - Common Bile Duct Exploration

Communicator

- Demonstrate an ability to communicate in a way that is sensitive to cultural differences.

- Demonstrate an ability to communicate effectively through a translator (where applicable).
- Demonstrate a commitment to patient privacy and dignity, while being sensitive to cultures that are often more community oriented.
- Ensure that consent for procedures is taken effectively and in a culturally appropriate way.

Collaborator

- Demonstrate an ability to work effectively as a member of the health care team.
- Demonstrate respect for the knowledge and expertise that each member of the team possesses, and make full use of each team member.
- Demonstrate an attitude of humility and willingness to learn from others, both physicians and non-physicians.

Manager

- Recognize the limitations of working in a resource-poor setting. Demonstrate careful use of supplies and resources.
- Be aware of what (if any) referral options exist, and refer appropriately where able.
- Be aware of what assistance (if any) is available to poor patients, and use these resources appropriately.

Health Advocate

- Use every clinical encounter as an opportunity to provide public health education for patients and their families.
- Recognize that prevention is an extremely important part of health care and is everybody's responsibility, and engage in preventive activities where possible.

Scholar

- Demonstrate a commitment to ongoing learning. It is expected that the resident will encounter many unfamiliar problems. Reading around cases is expected.
- If a research project is undertaken, the resident should demonstrate an ability to pose a pertinent clinical question and begin to investigate it. Adherence to ethical principles and guidelines must be demonstrated.

Professional

- Demonstrate compliance with the guidelines of the national medical board.
- Maintain the same high standard of professionalism and ethics as in Canada, recognizing that sometimes the approach to professionalism may need to be modified to fit the host culture's expectations and norms.
- Demonstrate awareness of personal limitations and a commitment to patient safety over personal experience and learning goals.