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الهيئة السورية  
للإختصاصات الطبية  
Syrian Board of Medical Specialties  
S B O M S

# Training Curriculum for General Surgery

PEPARED BY  
GENERAL SURGERY COMMITTEE

Training Curriculum for General Surgery



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## **Acknowledgment**

The General Surgery core curriculum team adopted the Saudi Board curriculum after proper modification according to the Syrian context, the Syrian Board of Medical Specialties thanks our colleagues in Saudi board for their great efforts to help Syrians Surgeons.

## **Introduction:**

General surgery is a five-year structured training program, upon completion of which the trainee will have developed basic knowledge, clinical skills, and professionalism. The key focus of the program is to develop a broad base of knowledge in general surgery. Trainees progressively acquire in-depth knowledge of the diverse field of general surgery specialty during their training .

Residents also develop clinical skills by utilizing appropriate diagnostic, investigative, and therapeutic judgment. Trainees acquire and sharpen their surgical skills in all general surgery specialties through training in safe practices, become competent in the management of common and serious diseases, and learn to effectively manage emergency cases .

The program focuses on professional behavior and medical ethics, as well as quality management and cost effectiveness. The foremost objective of the residency program is to graduate competent and well-trained residents, who are capable of functioning independently and able to provide optimal patient care in the field of general surgery

## **Nature and scope of the practice:**

The curriculum is a five-year structured program for training in general surgery. It encompasses education in basic sciences, training in cognitive and technical skills, development of clinical knowledge and maturity, and acquisition of surgical judgment.

The program provides an opportunity for in-depth learning of the fundamentals of basic sciences as applied to clinical surgery.

## **Training hospitals**

The Syrian Board of Medical Specialties requires hospitals to meet certain criteria before granting accreditation for training and requires the maintenance of these standards throughout the training period. Regular program evaluation visits are conducted by the committee for all accredited facilities.

## **Training Objectives:**

Providing comprehensive training in general surgery therefore the trainee will be skilled surgeon

after completion, and his information and competency in surgery is reliable in all aspects of surgery including: diagnosis, differential diagnosis, treatment, surgical skill and quality care for the patient after the operation with sufficient qualification in both elective and emergency procedures.

### **Details training objectives:**

1. Enable the graduate to obtain sufficient and core information for applied and practical surgical sciences (causes and treatment with the ability to track developments in the surgical sciences).
2. Enable the graduate to develop himself to be eligible to take responsibility as a surgeon able deal with the patient and with other medical and administrative staff.
3. Enable the graduate to self-follow-up medical education in the field of applied surgery, medical research and self-education so that he can specialize in sub-surgical specialty if he wishes.
4. Enable the graduate to obtain sufficient clinical information effectively, which guide him to make correct surgical decisions during his work as surgeon.
5. Enable the graduate to obtain sufficient surgical skill to perform accurate and safe surgical procedures.
6. Enable the graduate to acquire the proper professional behavior and knowledge of forensic medicine in terms of competence.
7. Teaching the surgeon ethics profession and medical responsibility.
8. Continuing medical education.
9. Encourage the use of Arabic in various medical field.

### **Entry Requirement:**

Conditions for those who wish to obtain a certificate of specialization in general surgery:

- 1- The applicant must have a university degree in medicine or equivalent from a recognized university or a medical school in a foreign country, provided that the college is recognized in the country where he was born and recognized by the Training Committee.
- 2- Arabic Fluent Speaker
- 3- Each accepted applicant must be registered in the program according to the registration form, prepared by the committee for this purpose, at one of SBOMS office.

### **Training:**

The training should be carried out in practical and scientific centers recognized by the Scientific Committee of General Surgery and SBOMS will annually issue the names of recognized centers.

### **Structure of the training program**

The SBOMS residency program in general surgery is a five-year structured program. The first three years are at the junior residency level and the last two years are at the senior residency level. During the junior level, the resident will spend 24 months in general surgery and rotate in other specialties for 12 months; however, residents should not be absent from general surgery for more than six months at a time. Trainees are required to attend and participate in the academic and clinical activities of the department, such as ward rounds, journal clubs, surgical pathology, radiology, immunology, and other activities. Attendance and participation shall not be less than 75% of the number of activities within any training rotation/period.

## Weekly Training program

The training center should provide the following activities according to programs placed at least weekly basis:

- 1- Bedside Rounds.
- 2- Operating Room.
- 3- Out-patient Department.
- 4- Emergency Department
- 5- Scientific Training such as:
  - i) Grand Round
  - ii) Journal Club
  - iii) Morbidity and Mortality Meeting
  - iv) Surgical Pathology Meeting
  - v) Surgical Radiology Meeting
  - vi) Multi-disciplinary team Meeting

## Trainee's Duties

- ◆ The trainee must ensure that the following information exists in each patient's file:
  1. Complete medical history with physical examination
  2. Radiological and laboratory tests results
  3. Treatment plan pre and post-surgical procedure
  4. Post-operative progress notes
  5. Other consultations
  6. Surgical informed consent copy
  7. Surgical report
  8. Anesthesia report
  9. Daily progress notes
  10. Discharge summary
- ◆ The trainee must work at the outpatient clinic at least once a week to examine and treat patients in the surgery department under the supervision of the trainer.
- ◆ Maintain good relations with the patient and his family and the medical, nursing and administrative staff.
- ◆ **Confidentiality.**
- ◆ Trainee must record his scientific activities in logbook:
  - 1- Operations (types, number and medical records)
  - 2- Meetings and conferences
  - 3- Logbook must be recognized and signed by trainer
- ◆ Core training Courses (when available):
  - 1- Basic Surgical Skills
  - 2- ATLS
  - 3- Basic statistic and research skills.
  - 4- Evidence based Surgery
  - 5- Presentation Skills.
  - 6- Communication Skills.
  - 7- Audit.
  - 8- Basic Laparoscopic Skills.

◆ Research activity

The trainee shall be encouraged to participate in research activities during the training program under the guidance and supervision of the trainers. At least one research project should be published before taking the final examination.

### **Clinical Rotations:**

#### **Junior level (R1, R2, and R3)**

##### **Rotation in general surgery (24 months)**

##### **Rotation outside general surgery (12 months)**

Intensive care unit (3 months)

Emergency department (3 months)

Vascular surgery (2 months)

OBGY surgery (1 month)

Plastic surgery (1 month)

Elective rotation (2 months) (orthopedic , Neurosurgery)

#### **Senior level (R4 and R5)**

##### **Rotation in general surgery (24 months)**

Candidates shall spend the final two years of training (R4, R5) as senior residents in general surgery units, where they will be responsible for managing emergency and elective admissions, organizing educational activities, and supervision of junior colleagues. Senior residents shall acquire gradual independence during this period of training.

### **Training Requirement:**

#### **General requirement:**

- a. Applicants should fulfil all admission requirements set by the SBOMS rules and regulations for admission into the programs.
- b. Trainees shall abide by the training regulations and obligations as set by the SBOMS
- c. Training is a full-time commitment. Residents shall be enrolled in full-time, continuous training for the entire program period.
- d. Training is to be conducted in institutions accredited for training by the SBOMS Recognition Committee for general surgery.
- e. Trainees shall be actively involved in patient care with gradual progression of responsibility.



## Medical Expert

### *Knowledge of Principles of Surgery*

- a. Knowledge of the anatomy of the anterior abdominal wall, breast, neck, oral cavity, esophagus, stomach, duodenum, small intestine, appendix, large intestine, rectum and anal region, gallbladder, extrahepatic biliary tree, liver, pancreas and spleen,.
- b. Knowledge of the physiology of the cardiac, respiratory, renal, gastrointestinal, hepatobiliary, pancreatic, immune, and vascular systems.
- c. Knowledge of the pathology of common inflammatory and malignant conditions.
- d. Ability to perform a concise history of present illness and physical exam.
- e. Ability to interpret common laboratory & radiologic tests.
- f. Ability to provide a legible, clear, and concise written record of consultation reports, pre-op and postop notes, progress notes, and discharge prescriptions.

### *Knowledge of Clinical Surgery*

Ability to diagnose and understand the pathophysiology, history, investigation, and management of different systems in relation to general surgery, including the following:

- The breast and endocrine system
- Hernias, abdominal wall, and soft tissue tumors
- Upper GIT (esophagus, stomach, and small intestine)
- Lower GIT (appendix, colon, rectum, and anus)
- Gastrointestinal bleeding
- Hepatobiliary (liver, pancreas, and spleen)
- Acute abdomen
- Surgical management of obesity
- Subspecialty surgery (vascular/pediatric/plastic)

### *Technical skills*

#### Junior Resident (R1-R2-R3)

- Demonstrate aseptic technique in performing operative and bedside procedures. Recognize the appearance of normal and abnormal tissues in the operating room.
- Gain proficiency in a variety of psychomotor skills (e.g., reduction of incarcerated inguinal hernia, wound closure, knot tying).
- Understand the principles of laparoscopy.
- Perform an umbilical, inguinal, and femoral hernia repair using tension-free techniques.

- Perform an open incisional hernia repair with or without mesh.
- Perform a complete examination of the anorectal region, including anoscopy.
- Perform lateral internal sphincterotomy for anal fissure under anesthesia.
- Perform breast biopsy and breast lump excision.
- Perform soft tissue lump excision and lymph node biopsy.

#### Senior Resident (R4–R5)

- Perform basic laparoscopic techniques:
  - Perform trocar insertion using the open technique in different locations of the abdomen, including with patients who have had extensive previous abdominal surgery.
  - Troubleshoot equipment. ○ Perform simple suturing using laparoscopic instruments.
  - Perform laparoscopic cholecystectomy, both electively and for acute cholecystitis.
  - Mobilize the right and left colon laparoscopically. ○ Mobilize the esophagus laparoscopically.
  - Perform lysis of adhesions and run the small bowel by laparoscopy.
  - Perform laparoscopic appendectomy. ○ Perform laparoscopic incisional hernia repair.
- Perform thyroidectomy and parathyroidectomy.
- Be familiar with the techniques and use of a harmonic scalpel, bipolar sealing device, and monopolar cautery, including the pitfalls and potential risks.
  - Colonic and rectal resections and reconstructions, using sutured and stapled techniques, for malignant disease and inflammatory bowel disease
  - Gastric resection and reconstruction (gastro-jejunostomy, Rouxen-Y)
  - Small bowel and large bowel resection; low anterior resection ○ Standard ileostomy and colostomy formation and closure ○ Biliary tract disease: common bile duct exploration; biliaryenteric anastomosis
  - Distal pancreatectomy ○ Splenectomy

### **Surgical Procedures Registry:**

Candidates should contribute in the surgical procedures according to the following "Four Point Scale" level of contribution and at least the number of procedures shown in the table:

<b>F1</b>	Observed
<b>F2</b>	Assisted
<b>F3</b>	Did with assistance
<b>F4</b>	Did independently

- \* In some training hospitals trainees are not allowed to do major surgical operations independently and in such a situation it could be accepted to consider F3 equals F4 (adding number of procedures together).

**The following schedule shows the minimum number of surgical procedures required during the 5-year training programs:**

Code	Procedures	Level of contribution			
		F1	F2	F3	F4
<b>1</b>	<b>Neck &amp; Salivary Gland Surgery</b>				
1.1	Excision of thyroglossal cyst / Fistula	1	1	1	0
1.2	Excision of branchial cyst / fistula	1	1	1	
1.3	Cervical lymph node biopsy		4	4	4
1.4	Block dissection of the neck	1	1		
1.5	Submandibular sialadenectomy		1	1	0
1.6	Parotidectomy	2	2		
<b>2</b>	<b>Breast Surgery</b>				
2.1	Drainage of breast abscess	2	2	3	5
2.2	Surgery of Benign Breast Conditions (lumpectomy, major duct excision, fibroadenoma, etc)		10	7	5
2.3	Mastectomy with Axillary Nodes Dissection	4	5	2	2
2.4	Wide Local Excision with Axillary Nodes Dissection	2	2	1	
2.5	Breast Mass Core Biopsy (Tru-cut)	4	4	4	3
2.6	Sentinel Lymph node sampling	1			
<b>3</b>	<b>Vascular &amp; Lymphatic Surgery</b>				
3.1	Arterial repair		2	2	
3.2	Embolectomy		4		
3.3	Arterial bypass surgery		4		
3.4	Aneurysm surgery		4		
3.5	Arteriovenous fistula		4	2	
3.6	Varicose vein surgery		2	2	
3.7	Amputation (Above & below Knee)		4	4	4
<b>4</b>	<b>Plastic Surgery</b>				
4.1	Operations on skin & subcutaneous tissues		5	5	10
4.2	Operations on muscles & tendons		4	4	
4.3	Skin graft		4	4	
4.4	Skin flap		2	2	
4.5	Cleft lip/palate		4		
4.6	Plastic Breast Surgery	1	2		
4.7	Abdominoplasty	1	2		
<b>5</b>	<b>Endocrine Surgery</b>				
5.1	Thyroidectomy		10	5	2
5.2	Parathyroidectomy	1	1		
5.3	Adrenalectomy	1	1		

<b>6</b>	<b>Cardiothoracic Surgery</b>				
<b>6.1</b>	Chest tube insertion		<b>5</b>	<b>5</b>	<b>3</b>
<b>6.2</b>	Pleural aspiration	<b>2</b>	<b>3</b>	<b>3</b>	
<b>6.3</b>	Thoracotomy	<b>2</b>	<b>2</b>		
<b>7</b>	<b>Neurosurgery</b>				
<b>7.1</b>	Evacuation of intracranial hematoma	<b>2</b>			
<b>7.2</b>	Laminectomy/Discectomy/Fixation of Spines	<b>2</b>			
<b>7.3</b>	Nerve repair		<b>2</b>		
<b>7.4</b>	Intracranial surgery	<b>2</b>			
<b>7.5</b>	Carpal Tunnel Syndrome		<b>2</b>		
<b>8</b>	<b>Orthopedic Surgery</b>				
<b>8.1</b>	Closed reduction of fractures	<b>5</b>	<b>5</b>		
<b>8.2</b>	Internal fixation of fractures	<b>5</b>	<b>2</b>		
<b>8.3</b>	Arthroplasty (hip-knee)	<b>4</b>	<b>1</b>		
<b>9</b>	<b>GTT&amp; Abdominal Surgery</b>				
<b>9.1</b>	Exploratory laparotomy		<b>10</b>	<b>5</b>	<b>3</b>
<b>9.2</b>	Esophageal surgery	<b>2</b>	<b>1</b>		
<b>9.3</b>	Peptic Ulcer Surgery		<b>5</b>	<b>5</b>	
<b>9.4</b>	Gastrectomy	<b>2</b>	<b>2</b>		
<b>9.5</b>	Gastrectomy / Jejunostomy		<b>1</b>	<b>1</b>	<b>1</b>
<b>9.6</b>	Splenectomy		<b>5</b>	<b>3</b>	<b>2</b>
<b>9.7</b>	Hepatic Surgery	<b>3</b>	<b>6</b>	<b>5</b>	
<b>9.8</b>	Open Cholecystectomy		<b>5</b>	<b>5</b>	<b>5</b>
<b>9.9</b>	Laparoscopic Cholecystectomy		<b>20</b>	<b>10</b>	<b>5</b>
<b>9.10</b>	Bile duct surgery		<b>4</b>	<b>1</b>	
<b>9.11</b>	Drainage of pancreatic pseudocyst		<b>1</b>	<b>1</b>	
<b>9.12</b>	Pancreatectomy	<b>1</b>	<b>1</b>		
<b>9.13</b>	Small bowel resection anastomosis		<b>5</b>	<b>5</b>	<b>5</b>
<b>9.14</b>	Ileostomy		<b>1</b>		
<b>9.15</b>	Colectomy	<b>2</b>	<b>5</b>	<b>5</b>	
<b>9.16</b>	Colectomy		<b>5</b>	<b>5</b>	<b>3</b>
<b>9.17</b>	Anterior resection of rectum		<b>4</b>		
<b>9.18</b>	Abdomino - perineal resections of rectum		<b>4</b>		
<b>9.19</b>	Appendectomy		<b>20</b>	<b>20</b>	<b>10</b>
<b>9.20</b>	Hemorrhoidectomy		<b>4</b>	<b>4</b>	<b>2</b>
<b>9.21</b>	Anal fissurectomy		<b>4</b>	<b>4</b>	<b>2</b>
<b>9.22</b>	Anal fistula surgery		<b>4</b>	<b>4</b>	<b>2</b>
<b>9.23</b>	Drainage of perianal abscess		<b>3</b>	<b>3</b>	<b>4</b>
<b>9.24</b>	Pilonidal sinus surgery		<b>5</b>	<b>5</b>	
<b>9.25</b>	Repair of epigastric/umbilical/paraumbilical hernia		<b>10</b>	<b>10</b>	<b>4</b>
<b>9.26</b>	Repair of inguinal hernia		<b>10</b>	<b>10</b>	<b>5</b>

9.27	Repair of femoral hernia		1	1	
9.27	Incisional hernia repair surgery		5	5	
9.28	Bariatric Surgery	2	3		
<b>10 Pediatric Surgery</b>					
10.1	Pediatric Inguinoscrotal surgery		7	5	
10.2	Surgery for Pediatric GIT Obstruction (e.g. TEF, pyloric stenosis, intestinal atresia, Hirschsprung disease, anorectal malformation)	2	2		
10.3	Hypospadias repair	2	2		
10.4	Male Circumcision		5	5	
<b>11 Urogenital Procedures</b>					
11.1	Insertion of urinary catheter		10	10	5
11.2	Nephrectomy		2		
11.3	Endourological procedures	5	5		
11.4	Open urinary stones surgery (kidney, ureter & bladder)		5		
11.5	Suprapubic cystostomy	1	2		
11.6	Cystectomy	1	1		
11.7	Prostatectomy	1	1		
11.8	Varicocelectomy		4	3	
11.9	Hydrocelectomy		5	5	
11.10	Orchidectomy		2	2	
<b>12 Miscellaneous</b>					
12.1	Insertion of central venous line / Portacath				
12.2	Endotracheal intubation				
12.3	Tracheostomy				
12.4	Lymph node biopsy				

## Method of clinical requirement documentation

The trainee shall be required to document all his/her clinical procedures throughout the program using an electronic logbook when available by the commission; otherwise, an ordinary logbook is to be used. Activities should be dated and categorized into the period/rotation of training and whether they were performed by the trainee or with the trainee as an assistant or participant. Each activity registered in the logbook should be countersigned by the Program Director when deemed complete. The logbook should include the operative procedures and technical skills acquired during the training.

## **Profile of practice**

The graduate is expected to meet the following criteria with respect to capabilities and skills:

- Have sound knowledge of the principles of surgery.
- Formulate reasonable and comprehensive differential diagnoses for common surgical disorders.
- Recognize emergency surgical situations and manage them effectively.
- Select relevant investigations logically and conservatively and interpret their results accurately.
- Manage common problems in general surgery and have knowledge of management alternatives.
- Perform specified surgical, diagnostic, and therapeutic procedures and operations; especially those used in the management of emergencies and common surgical problems.
- Communicate well with patients, their relatives, and colleagues.
- Keep orderly and informative medical records.
- Stay educated and updated and inform others in the field.
- Advise colleagues from other specialties with regard to problems related to surgery.
  - Possess high ethical and moral standards.

## **Description of Core General Surgery Teaching Topics**

### **A. Basic Principles of Surgery**

#### ***Fluid and Electrolytes in Surgical Patients:***

1. Normal body fluids and compartments
2. Common changes in bodily fluids (volume and concentration)
3. Electrolytes changes: etiology and diagnosis (sodium, potassium, calcium, magnesium, and phosphorus)
4. Acid-base homeostasis
5. Intravenous fluids: types, compositions, and clinical uses
6. Electrolytes abnormalities in specific surgical patients: neurological patients, malnourished patients, acute renal failure, and cancer patients

### ***Management of Shock***

- Identification of critically ill patients
- Pathophysiology of shock and systemic responses
- Metabolic response to shock
- Immune and inflammatory responses to shock
- Types of shock: diagnosis and treatment
- Assessment of endpoints in resuscitation

### ***Hemostasis in Surgical Practice***

- Biology of hemostasis
- Coagulation disorders: congenital and acquired
- Principles of blood transfusion
- Indications and contraindications of transfusion
- Complications of transfusion
- Evaluation of hemostatic risks in surgical patients

### ***Surgical Site Infections: Prevention and Management***

- Pathogenesis of infection
- Microbiology of infectious agents
- Prevention and management of surgical infections
- Surgical site infections
- Nosocomial infections

### ***Surgical Management of Organ-Specific Trauma***

- Initial evaluation and resuscitation of the injured patient: primary and secondary surveys
- General principles of management in a trauma patient
- Evaluation of head injuries
- Approach to neck and cervical spine injuries
- Approach to chest trauma: wall and diaphragm, heart and great vessels, respiratory tract and esophagus
- Approach to abdominal solid organ injuries: liver, spleen
- Approach to abdominal hollow viscus injuries
- Approach to abdominal vessels injuries
- Intensive care management in trauma and postoperative considerations



## ***Surgical Complications, Prevention, and Management***

- Common surgical complications
- Preventive measures
- Specific surgical complications: pain, fever, wound-related complications, and systemic complications
- Specific management of common surgical complications
- Health education: approach to a patient with surgical complications

## ***Nutrition in Surgical Patient***

- Causes and consequences of malnutrition in the surgical patient
- Fluid and electrolyte requirements in the preoperative and postoperative patient
- Nutritional requirements of surgical patients
- Nutritional consequences of intestinal resection
- Methods of providing nutritional support
- Complications of TPN

## ***Acute and Postoperative Pain Management***

- Principles of analgesia
- Anesthetic agents: local, regional, and general
- Postoperative pain management

## ***Complications of postoperative pain.***

## ***Preoperative Assessment of Surgical Patients***

- Tasks involved in preparing a patient for theatre
- Common problems affecting a patient's fitness for operation
- How to optimize a patient's medical state prior to anesthesia and surgery
- How to obtain informed consent
- The organization of an operating list

## ***Understanding the Principles of Wound Healing***

- Normal healing and how it can be adversely affected

- How to manage wounds of different types, of different structures, and at different sites
- Aspects of disordered healing that lead to chronic wounds
- Types of scars and their treatment

### ***Approach to Burns***

- Initial evaluation of a burn patient
- Resuscitation in burns
- Inhalation injuries and ventilator management
- Treatment of burn wounds
- Complications in burn care

### ***Management of Diabetic Foot***

- Pathophysiology of diabetic foot
- Comprehensive clinical assessment of diabetic foot patients: history, physical examination, diagnostic images
- Short-term management of diabetic foot
- Long-term management of diabetic foot
- Patient education and continuity of care

## **B. Clinical/Systemic Surgical Topics**

### ***An Approach to Thyroid Goiter***

- Development and anatomy of the thyroid gland
- Physiology and investigation of thyroid function
- Investigation of thyroid swelling
- Treatment of thyroid dysfunction
- Indications for and techniques of thyroid surgery
- Management of thyroid cancer
- Risks and complications of thyroid surgery

### ***An Approach to Breast Mass***

- Structure of a normal breast (anatomy and physiology)
- Triple assessment of breast complaint

- Surgical management of benign breast conditions
- Breast cancer screening and management overview

### ***Management of Hyperparathyroidism***

- Development and anatomy of the parathyroid glands
- Physiology and investigation of parathyroid function
- Investigation and management of hyperparathyroidism (primary, secondary, and tertiary)
- Indications for parathyroid gland surgery
- Risks and complications of parathyroid surgery
- Postoperative hypocalcemia

### ***Approach to Adrenal Mass***

- Normal adrenal glands (anatomy and physiology)
- Proper history taking and physical examination
- Approach to adrenal cortex disorders (diagnosis and surgical management)
- Approach to adrenal medulla disorders (diagnosis and surgical management)

### ***Management of Abdominal Wall Hernias***

- Surgical anatomy of the abdominal wall
- Etiologies of abdominal wall hernias
- Proper abdominal examination including hernia orifices
- Classification of hernias
- Surgical techniques for hernia repair
- Patient education regarding post-hernia repair

### ***Management of Soft Tissue Tumors***

- Structure and functional properties of skin
- Clinical approach to soft tissues tumors (benign and malignant)
- Classification of benign skin tumors
- Classification of malignant skin tumors and vascular skin lesions
- Indications of surgical interventions in soft tissue tumors
- Common cutaneous manifestations of generalized disease that are seen in surgical practice

- International Journals

### ***Management of Gastrointestinal Bleeding***

- Proper history taking from a patient with gastrointestinal bleeding
- Proper physical examination for a patient with gastrointestinal bleeding
- Initial management of gastrointestinal bleeding
- Differential diagnosis of UGIB and LGIB
- Workup of UGIB
- Workup of LGIB

### ***Approach to Gastroesophageal Reflux Disease (GERD)***

- Proper history taking from a patient with reflux
- Differential diagnosis related to reflux
- Diagnostic measures in GERD
- Surgical management of GERD and techniques
- Complications of GERD and surgical management
- Patient education and follow-up

### ***Approach to Gastric Cancer***

- Awareness of risk factors
- Pathology of gastric cancer
- Classification and staging
- Treatment modalities

### ***Intestinal Obstruction: Understanding the Pathology and Management***

- Knowledge of the etiology of small bowel obstruction
- Understanding the pathophysiology
- Identifying clinical manifestation and diagnosis
- Proper management of bowel obstruction

### *Approach to an Appendicular Pathology*

- Related clinical anatomy
- Pathophysiology of appendicitis
- Other inflammatory conditions
- Neoplasms of the appendix

### *Management of a Patient with Acute Abdomen*

- Proper work up for the patient with acute abdomen
- Appropriate laboratory and imaging tests
- Role of diagnostic laparoscopy
- Differential diagnosis
- Differential algorithms

### *Approach to Colorectal Cancers*

- Knowledge of colorectal cancer genetics
- Understanding the adenoma-carcinoma sequence
- Awareness of different hereditary cancer syndromes
- Screening and diagnostic modalities
- Management of rectal cancer

### *Management of Common Anal Conditions*

- Knowledge and understanding of the anatomy and physiology of the anal canal and pelvic floor
- Clinical presentation and diagnostic evaluation

- Treatment modalities of common anal conditions

### ***Surgical Management of Obesity***

- Recognize the various types of Bariatric surgical procedures
- Knowledge of the indications and contraindications for each procedure
- Patient selection and preoperative care
- Postoperative follow-up and long-term care
- Complications of Bariatric surgery

### ***Management of Obstructive Jaundice***

- Understanding bile duct anatomy and physiology
- Recognizing benign and malignant causes of bile duct obstruction
- Diagnostic work up for obstructive jaundice
- Differential diagnosis
- Treatment modalities

### ***Approach to Malignant Liver Tumors***

- Recognize risk factors and predisposing conditions
- Appropriate diagnostic work-up
- Tumor staging and patient classification
  - Management strategies

## **C. Professional Development Topics**

### ***Communication Skills Topics***

#### **Communicating with Patients and Relatives**

- Effectively facilitate the doctor-patient relationship, and the dynamic exchanges that occur before, during, and after the medical encounter.

- Convey relevant information and explanations accurately to patients and families, colleagues, and other professionals.
- Convey effective oral and written information about a medical encounter.

#### Documentation

- Recognizing the importance of proper documentation
- Principles of medical documentation
- Maintain the standard of documentation

#### Informed consent

- Principles of informed consent (autonomy, beneficence, and justice)
- The process of obtaining informed consent

## **LIST OF SUGGESTED REFERENCES FOR GENERAL SURGERY PRACTICE**

### **Textbooks**

- 1. Schwartz Principles of Surgery, 10th Ed.**  
F. Brunicaudi, Dana Andersen, Timothy Billiar, David Dunn, John Hunter, Jeffrey Matthews, Raphael E. Pollock
- 2. Sabiston Textbook of Surgery, 19th Ed.**  
Courtney M. Townsend, R. Daniel Beauchamp, B. Mark Evers, Kenneth L. Mattox
- 3. Acute Care Surgery**  
L. D. Britt, Phillip S. Barie, Andrew B. Peitzman, Gregory Jurkovich
- 4. Advanced Surgical Recall** Lorne H. Blackbourne
- 5. General Surgery Board Review**  
Larry A. Scher, Gerard Weinberg
- 6. Greenfield's Surgery Scientific Principles & Practice, 5th Ed.**  
Michael W. Mulholland, Keith D. Lillemoe, Gerard M. Doherty, Ronald V. Maier, Diane M. Simeone, Gilbert R. Upchurch
- 7. Master Techniques in General Surgery**  
A series of textbooks that present common and advanced procedures in the major subspecialties of general surgery. The series is overseen by Josef E. Fischer, MD.

## 8. Complications in Surgery

Michael W. Mulholland, Gerard M. Doherty

### Journals

1. Journal of Trauma and Acute Care Surgery
2. Archives of Surgery
3. The American Journal of Surgery
4. British Journal of Surgery
5. Canadian Journal of Surgery
6. Journal of Surgical Research
7. International Journal of Surgery

