GENERAL SURGERY ROTATION
Surgery A, B, TDC & St. Joseph’s Medical Center
(PGY-2)

A. Medical Knowledge

I. Surgical Oncology

Goal: The resident will achieve a detailed knowledge of the evaluation and management of surgical oncology patients.

Objectives: The resident will be able to…

1. Discuss the basic pathophysiology of the mechanisms involved in malignant transformation, tumor growth, and metastases formation
2. Recite the natural history and biologic behavior of specific tumor types, including:
   a. Breast cancer
   b. Colorectal cancer
   c. Other GI malignancies
   d. Pancreatic and Hepatobiliary malignancies
   e. Melanoma
   f. Sarcoma
3. Discuss treatment of the above malignancies including:
   a. Staging
   b. Indications for operative management
   c. Selection of appropriate surgical procedures.
   d. Adjuvant treatment regimens
   e. Treatment of advanced stage disease
4. Become familiar with the details of the management of wounds in the surgical oncology patient –intraoperative and post-operative
5. Discuss the differences of chemotherapy drugs in surgical oncology patients.
6. Discuss the side effects and toxicities of common chemotherapeutic regimens used in surgical patients

II. Abdominal Surgery

Goal: The resident will achieve a detailed knowledge of the evaluation and management of the general surgical patient with abdominal complaints.

Objectives: The resident will be able to…
1. Discuss the evaluation, diagnosis, and management of the acute abdomen.

2. Discuss the pathophysiology, evaluation, and diagnosis of the following disorders of the small intestines. You should begin to learn the basics of surgical management.
   a. Small bowel obstruction
   b. Regional enteritis/ Crohn’s Disease
   c. Meckel’s diverticulum
   d. Carcinoid tumors
   e. Appendicitis
   f. Intestinal ischemia

3. Discuss the Pathophysiology, evaluation, and diagnosis of the following disorders of the colon, rectum, and anus. You should begin to learn the basics of surgical management.
   a. Diverticulitis
   b. Large bowel obstruction
   c. Crohn’s disease
   d. Ulcerative colitis
   e. Constipation
   f. Ogilvie’s syndrome
   g. Benign and malignant neoplasms of the colon and rectum
   h. Perirectal abscess
   i. Pilonidal disease
   j. Hemorrhoids
   k. Anal fissures
   l. Perianal fistulas
   m. Lower GI bleeding
   n. Ischemic colon
   o. Polyposis syndromes
   p. Volvulus

4. Discuss the Pathophysiology, evaluation, and diagnosis of the following disorders of the esophagus, stomach, and duodenum. You should begin to learn the basics of surgical management.
   a. Achalasia, diffuse esophageal spasm, and other motility disorders
   b. Esophageal cancer
   c. Barrett’s esophagus
   d. Gastroesophageal reflux disease
   e. Benign gastric tumors
   f. Gastritis and upper GI bleeds
   g. Malignancies of the stomach and duodenum
   h. Inflammatory bowel disease

5. Discuss the pathophysiology, evaluation, and diagnosis of the following disorders the pancreas and biliary system. You should begin to learn the basics of surgical management.
a. Acute cholecystitis  
b. Chronic cholecystitis and cholelithiasis  
c. Cholangitis  
d. Gallstone pancreatitis  
e. Gallstone ileus and fistula  
f. Gallbladder carcinoma  
g. Acute pancreatitis  
h. Chronic pancreatitis  
i. Pancreatic pseudocyst  
j. Benign and malignant pancreatic neoplasms  
k. Endocrine tumors  
l. Hepatocellular carcinoma  
m. Metastases of the liver from other primary cancers

III. Breast Surgery

Goal: The resident will achieve a detailed knowledge of the evaluation and management of the breast patient.

Objectives: The resident will be able to...
1. Discuss the pathophysiology, evaluation, and diagnosis of the breast mass. You should begin to learn the basics of surgical management
2. Describe the evaluation of non-palpable breast abnormalities
3. Recite the screening for breast cancer
4. Discuss the appropriate use of mammography, ultrasound, fine needle aspiration, stereotactic, and open biopsies
5. List the risk factors for development of breast cancer
6. Discuss the preoperative staging of breast cancer
7. Discuss the genetic predisposition to breast cancer
8. Discuss the indications for preoperative chemotherapy and radiation therapy for breast cancer
9. Discuss the surgical options for ductal carcinoma in situ and invasive breast cancer
10. Describe the basic steps of the surgical procedures used for breast disease.
11. Discuss the meaning of “adjuvant treatment regimens” and become familiar with the indications for their use in breast cancer.
12. Define advanced breast cancer and discuss the natural history.
13. Discuss the significance of lobular carcinoma in situ
14. Discuss the indications for anti-estrogen therapy

IV. Minimal Access Surgery
**Goal:** The resident will achieve a detailed knowledge and understanding of minimally access surgery.

**Objectives:** The resident will be able to...

1. Discuss the advantages and disadvantages of minimally invasive surgery.
2. Discuss the suitability of minimally invasive surgery for various disease processes.
3. Recite the physiologic effects of pneumoperitoneum, including:
   a. Acidosis
   b. Cardiovascular changes
   c. Urine output
   d. Pulmonary
   e. Air embolism
   f. Deep venous thrombosis
4. Identify and know the use of basic equipment necessary for a laparoscopic procedures
5. Discuss the methods of accessing the abdominal cavity for laparoscopic cases
6. Identify the potential intraoperative and postoperative complications of minimally invasive surgery, including the pathophysiology

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**V. Endocrine Surgery**

**Goal:** The resident will achieve a detailed knowledge of the evaluation and management of the endocrine surgery patient.

**Objectives:** The resident will be able to...

1. Discuss the pathophysiology, evaluation, and diagnosis of surgical endocrine disease. You should begin to learn the basics of surgical management.
   a. Hot and cold thyroid nodules
   b. Adrenal masses and pheochromocytomas
   c. Primary, secondary, and tertiary hyperparathyroidism
   d. Pancreatic islet tumors
   e. Inherited endocrine tumor syndromes
   f. Thyroid malignancies
   g. Substernal goiters
2. Describe the care of patients with postoperative hypocalcemia
3. Describe the common complications associated with thyroid and parathyroid surgery
B. Patient Care

Goal: The resident will provide patient care that is compassionate, appropriate, and effective for the treatment of cardiothoracic problems.

Objectives: The resident will be able to...

1. Recite the steps of the preoperative evaluation of the fitness of a patient for surgery including cardiac screening, nutritional status, bowel preps, antibiotic prophylaxis, DVT prophylaxis, pre-operative fluid therapy, etc.
2. Observe and begin to participate in the preparation and positioning of patients for open and minimally invasive surgical procedures.
3. Perform, with graduated independence, bedside procedures, to include:
   a. Wound care
   b. Drain care
   c. Feeding tube placement and care
   d. Placement and care of central lines
   e. Placement and care of pleural catheters
   f. Placement and care of nasogastric tubes
   g. Placement and care of foley catheters
4. Demonstrate in the lab first, and then in the OR, the techniques in minimally invasive surgery, including:
   a. Maneuvering an angled laparoscope
   b. Intracorporeal knot-tying
   c. Closing port sites
   d. Endoscopic stapling
   e. Harmonic scalpel use
   f. Placement of endoscopic loop
   g. Bimanual dexterity
5. Demonstrate in the lab first, and then in the OR, the basic open operative skills, including:
   a. Incision of tissues
   b. Suturing techniques
   c. Knot tying
   d. Gentle handling of tissues
   e. Wound closure
   f. Dressings
6. Participate, with graduated independence, in the following basic general surgery procedures:
   a. Drainage of abscesses
   b. Excisions of skin lesions at all depths
   c. Fistulotomy and sphincterotomy
   d. Rigid proctoscopy
   e. Lymph node biopsies
f. G- and J-tube insertions

g. Hernia repairs

h. Tracheostomy

i. Breast biopsies

j. Colonoscopy/EGD/PEG placement

7. Participate, primarily as a surgical assistant, in general surgery procedures, including:

a. Bowel resections

b. Lysis of adhesion

c. Formation of stomas

d. Cholecystectomies

e. Segmental mastectomy

f. Simple or modified radical mastectomy

g. Axillary dissection

h. Sentinel node mapping and sampling

8. Observe and participate as a surgical assistant, in general surgery procedures (laparoscopic and/or open) including:

a. Splenectomy

b. Gastric resections

c. Pancreatic resections

d. Liver resections and biliary reconstructions

e. Deceased donor kidney transplantation

f. Thyroid lobectomy and total thyroidectomy

g. Parathyroidectomy

h. Adrenalectomy

i. Melanoma procedures

   i. Evaluation of suspicious skin lesions

   ii. Wide local excision

   iii. Sentinel node mapping

   iv. Regional lymph node dissections

9. Perform, with graduated independence, postoperative management and care for surgical patients

   a. Timing of advancing diets

   b. Drain management

   c. Early ambulation

   d. VTE prophylaxis

10. Perform, with graduated independence, the management of intraoperative and postoperative complications of open and minimally invasive surgery

11. Perform, with graduated independence, interpretation of laboratory and diagnostic tests

12. Perform, with graduated independence, interpretation of radiologic diagnostic test/examinations
C. Practice Based Learning and Improvement

**Goal:** The resident will investigate and evaluate his or her own patient care practices, appraise and assimilate scientific evidence, and improve patient care practices.

**Objectives:** The resident will be able to…

1. As per *PGY 1 General Core Competencies*

D. Interpersonal and Communication Skills

**Goal:** The resident will demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and professional associates.

**Objectives:** The resident will be able to…

1. As per *PGY 1 General Core Competencies*

E. System Based Practice

**Goal:** The resident will demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

**Objectives:** The resident will be able to…

1. Coordinates all aspects of the preoperative and postoperative care and rehabilitation surgical patients
2. Create a cost-effective, focused work-up of diagnostic testing
3. Advocate for surgical patients within the health care system
4. Facilitate the timely discharge and/or placement of surgery patients
5. Refer surgical patients to the appropriate practitioners and agencies
6. Coordinate the admission of patients and communicate with primary care physicians, inpatient house staff, and consultants
7. Discuss the scientific basis and regulations governing clinical trials and their importance in defining appropriate therapy
8. Coordinate the total care of the surgical patient by partnering with other members of the medical team, such as:
   a. Medical oncologist
   b. Radiation oncologists
   c. Clinical Researchers
d. Pathologist
e. Radiologists
f. Geriatricians
g. PCP’s
h. Hospitalists
i. Critical Care Medicine
j. Nurse coordinators
k. NPs and PAs
l. Social workers
m. Pastoral care
n. Hospice
o. Dieticians

9. Participate in conferences and committees.
   a. Grand rounds
   b. Morbidity and mortality conference
   c. Geriatric education for specialty residents conference
d. Journal club
e. Case conference
f. Tumor boards and surgical oncology
g. Transplant committees
h. GI and colorectal

F. Professionalism

**Goal:** The resident will demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

**Objectives:** The resident will be able to…

1. Develops a sensitivity of the unique stresses placed on families under care for general surgery
2. Exhibits an unselfish regard for the welfare of general surgery patients
3. Demonstrates firm adherence to a code of moral and ethical values
4. Is respectful to patients and their families especially in times of stress to the family unit
5. Respects and appropriately integrates other members of the general surgery health care team
6. Demonstrates sensitivity to the individual patient’s profession, life goals, and cultural background as they apply to surgery
7. Is reliable, punctual, and accountable for own actions in the OR and clinic
8. Understands the concepts of autonomy, beneficence, nonmaleficence, justice, and respect for life
9. Maintains patient confidentiality
**General Surgery Reference:**

**PRIMARY TEXT:**


**Oncology Reference:**

**General Surgery Educational Conference Schedule**

Weekly – Every Wednesday
- Surgical Quality Improvement Conference 7:00 – 8:00am
- Grand Rounds 8:00 – 9:00am
- SCORE Education Conference 9:00 – 10:00am
- Case Conference/ Journal Club 10:00 – 11:00pm
- Instruction in Simulation 11:00-12:00
- Instruction and Practice in Simulation (by schedule times) 1300-1500