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ROTATION: GASTROINTESTINAL SURGERY (U SURGERY)

ROTATION DIRECTOR: Darryl Hiyama, M.D.

SITE: Ronald Reagan UCLA Medical Center

GOALS: To provide trainees an opportunity to participate in the perioperative and operative aspects of gastrointestinal surgery.

LEVEL OF TRAINEE(S): R5

Monitoring of the accomplishment of the stated objectives will be performed using the following methods:

Global Rating: summary rotation evaluation of resident performance to assess the resident's demonstration of Core Competencies with respect to the stated objectives by faculty, other team resident members, students, and nursing staff.

Case Logs: audit of operative cases pertinent to the specialty in the Surgical Operative Log.

Multiple Choice Examination: performance on the annual ABSITE examination, Gastrointestinal section.

DESCRIPTION OF THE ROTATION:

The GI Surgery rotation of 2 months in the R5 years.

All trainees assigned to the service will be part of the GI Surgery team and responsible for the care of the GI surgery patients.

The surgery residents will provide in-patient care including routine admissions and critical care of patients.

Residents will further participate in surgical operations needed on these patients under direct supervision by the surgical faculty.

The rotating residents will participate in all Department of Surgery educational conferences and didactic presentations.

Residents are expected to actively participate and present at the weekly Multidisciplinary Surgery Conference.

COMPETENCY BASED LEARNING OBJECTIVES

Patient Care:

Perform complete and thorough history and physical examinations, with emphasis in elements unique to GI surgery patients.
Initiate the laboratory evaluation and any other initial diagnostic studies with an understanding of the tests to be ordered.
Become familiar in the preoperative preparation of the patients for GI surgery and routine postoperative care.
Understand the basic indications for common radiological and interventional studies used in the care of GI surgery patients such as plain films, CT scans, and contrast studies.
Demonstrate the ability to effectively set priorities and coordinate the care of GI patients.

Medical Knowledge:

ABDOMINAL SURGERY

Discuss the following causes of paralytic ileus:
- Postoperative electrolyte imbalance
- Retroperitoneal pathology
- Trauma
- Extraperitoneal disease (central nervous system, lung)

Consider the issues regarding wound complications:
Risk factors for abdominal wound infection.
Contributing factors for abdominal wound dehiscence and evisceration.
What are the usual clinical presentations and timing?
What is the incidence of wound infection in operations involving the biliary tree, stomach, upper GI tract, small intestine, and colon?

Identify the anatomic locations for the following intra-abdominal abscesses:
- left subphrenic space
- right subphrenic space
- subhepatic space
- lesser sac
- interloop
- pelvis
- left paracolic gutter
- right paracolic gutter
- psoas muscle

Consider the issues in deciding between percutaneous drainage versus operative drainage for each of the abscesses listed above. Describe the safest and most effective approach using each technique.

Differentiate between the following intestinal fistulas and the organs to which they most often communicate:
- Esophageal
- Gastric
- Duodenal
- Enteric
- Colonic
Explain the formation of fistulas in each of the following disease processes or factors:
Operative complications (bowel injury with abscess formation)
Inflammatory bowel disease
Foreign body or prosthetic material
Malignancy

Explain the role of a fistulogram in the diagnosis of intra-abdominal fistulas and abscesses.

List the factors that prevent healing of a fistula.

Summarize the conditions favoring operative versus non-operative treatment for fistulas listed above.

ALIMENTARY TRACT

Review the nutritional needs of surgical patients
Discuss the principles of intestinal healing
Review the common causes of the following conditions:
Ulceration of the proximal and distal GI tract
Causes of GI obstruction
Causes of paralytic ileus
Causes of GI hemorrhage
Causes of GI perforation
Causes of abdominal abscess formation or secondary peritonitis
Short gut and malabsorptive conditions
Inflammatory bowel diseases
Ischemic bowel

Discuss motility diseases of the esophagus to include:
Motility disorders
Gastroesophageal reflux

Outline the essential characteristics specialized diagnostic evaluation of the alimentary tract, including:
Barium swallow
Upper GI Series with small bowel follow-through
CT enterography
Ultrasound
Computerized Tomography
Magnetic Resonance Imaging
Barium enema
Angiograms
Fiberoptic endoscopy (upper and lower)
Endoscopic ultrasonography
Rigid anoscopy and sigmoidoscopy
Manometry
pH measurement
Gastroanalysis (basal and stimulated)
Radioisotope clearance studies
Technetium 99m
Technetium HIDA (hepatic 2,6-dimethyliminodiacetic acid) dynamic biliary imaging
Gastric emptying studies
Transit times
Hormonal determinations

Summarize current medical management and its potential limitations; explain the role of surgical intervention when management fails in the following:

Gastroesophageal reflux
Peptic ulcer disease
Gastroparesis
Inflammatory bowel disease
Upper and lower GI bleeding
Diverticulitis

Discuss the pathogenesis, presentation, diagnosis, and surgical management of the following conditions:
Gastric cancer
Colon cancer
Rectal cancer

Practice Based Learning:

Develop a personal program of self-study and professional growth with guidance from the teaching staff and senior residents. An understanding of the etiology, pathogenesis, pathophysiology, diagnosis and management of gastrointestinal disorders will allow for sound surgical judgment, which relies on knowledge, rational thinking and the surgical literature.
Utilize current literature resources to obtain up-to-date information in the GI patients and practice evidence-based medicine.
Participate in teaching and organization of the educational weekly Multidisciplinary Surgery Conference.
Participate in activities of the Department of Surgery (including all teaching conferences) and assume responsibility for teaching and supervision of subordinate surgical house staff, and medical students.
Participate in the Department Morbidity & Mortality conference and utilize information to further improve patient care.
Participate in daily teaching rounds and be able to present patients in an organized and complete fashion

Professionalism:
Goals and Objectives

Practice compassionate patient care maintaining the highest moral and ethical values with a professional attitude.
Demonstrate understanding of the needs and feelings of others, including the patient's family members, allied health care personnel (nurses, clerical staff, etc.), fellow residents, and medical students.
Communicate and collaborate effectively in a team of health care providers
Demonstrate respect, compassion and integrity in the care of GI surgery patients on a daily basis
Demonstrate mature and educated approach to ethical issues commonly encountered in a cardiac surgery setting.
Show sensitivity to patients culture, age, gender and disabilities
Recognize and appropriately handle sensitive cases of abuse
Be self-aware and have knowledge of professional limits by practicing on-going medical education and self-improvement.
Be accountable to profession in their actions and decisions

Interpersonal Relationships And Communication:

Create and sustain a therapeutic and ethically sound relationship with patients and patient families
Work effectively with other members of the medical team including allied health care personnel (nurses, clerical staff, etc.), fellow residents, and medical students.
Maintain professional interactions with other health care providers and hospital staff

Systems Based Practice:

Understand how the health care organization affects surgical practice of GI surgery
Demonstrate cost effective health care
Be able to coordinate multi-specialty and multidisciplinary GI surgery practice including discharge planning, social service, rehabilitation, and long term care
Follow established practices, procedures, and policies of the Department of Surgery and integrated and affiliated hospitals.
Maintain complete of medical records operative notes staff sheets and notes, patient database cards and other patient care related documentation in a timely, accurate and succinct manner.