

# General Surgery Service

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## Patient Care

### Goals and Objectives

#### Stomach/Duodenum and Bariatric

- 1) Interpret the results of clinical evaluations (history, physical examination) performed on patients being assessed for
  - a) Obesity surgery
  - b) Treatment of
    - i) Adenocarcinoma of the stomach
    - ii) GIST
    - iii) Carcinoid
- 2) Optimize postoperative care of patients undergoing bariatric procedures by assessing patient risk, and focusing on
  - a) Pulmonary hypertension, coronary artery disease, and right heart failure
  - b) Sleep apnea and hypoxemia/hypoventilation syndrome
  - c) Associated hepatobiliary disease
  - d) VTE prophylaxis
  - e) Infection prophylaxis
  - f) Management of diabetes
- 3) Interpret the results of postoperative patient monitoring after bariatric procedures, focusing on
  - a) Fluids and electrolytes
  - b) Pain management
  - c) Oxygenation (continuous pulse oximetry)
- 4) Interpret the results of postoperative monitoring to identify complications after bariatric procedures, including
  - a) Anastomotic leak (of gastrojejunostomy, jejunojejunostomy, or gastric remnant staple line)
  - b) Bleeding (intraluminal versus intraabdominal)
  - c) Acute gastric obstruction (band)
  - d) VTE
  - e) Soft tissue and deep infection
  - f) Pneumonia

#### Gallbladder

- 1) Interpret the results of clinical evaluations (history, physical examination) performed on patients being evaluated for
  - a) biliary colic
  - b) biliary dyskinesia
  - c) choledocholithiasis
- 2) Optimize preoperative preparation of patients undergoing biliary procedures by assessing patient risk.
- 3) Interpret the results of postoperative monitoring to manage patient recovery after biliary procedures.
- 4) Interpret the results of postoperative monitoring to identify complications after biliary procedures, including:
  - a) Bile leak

- b) Biliary stricture
- c) Wound infection and deep infection

### **Acute Abdomen**

- 1) Interpret the results of clinical evaluations (history, physical examination) performed on patients with acute abdominal pain, being evaluated for
  - a) Appendicitis
  - b) Pancreatitis
  - c) Cholecystitis
  - d) Small bowel obstruction
  - e) Mesenteric or colonic ischemia
  - f) Acute hernia
  - g) Perforated viscus
- 2) Identify the optimal imaging and laboratory assessment of patients being evaluated for the above conditions.
- 3) Optimize preoperative preparation of patients undergoing emergency procedures for the above conditions, including
  - a) Correction of volume and electrolyte deficits
  - b) Antimicrobial therapy
  - c) Management of coagulopathy
- 4) Interpret the results of postoperative monitoring to manage patient recovery after emergency procedures for the above conditions
- 5) Interpret the results of postoperative monitoring to identify complications after emergency procedures for the above conditions including
  - a) Intra-abdominal abscess after appendectomy, cholecystectomy, bowel resection
  - b) Necrosis, pseudocyst formation or bleeding after pancreatectomy
  - c) Ileus
  - d) Anastomotic leak
  - e) Bowel obstruction

### **Complex and/or Reoperative Surgery (including ventral hernia, enterocutaneous fistulas)**

- 1) Interpret the results of clinical evaluations (history, physical examination) performed on patients being evaluated with the above conditions to prioritize initial management including
  - a) Control of infection
  - b) Volume and electrolyte resuscitation
  - c) Nutritional support
- 2) Determine the optimal diagnostic approach to evaluate patients with the above clinical conditions to achieve the following goals
  - a) Immediate need for assessment and control of infection
  - b) Overall status assessment to identify
    - i) the patient's tolerance for the treatment options
    - ii) the timing of definitive treatment
- 3) Use the results of the diagnostic imaging studies to determine the treatment options for the above clinical conditions.
- 4) Interpret the results of postoperative monitoring to manage patient recovery after procedures for the above conditions
- 5) Interpret the results of postoperative monitoring to identify complications after procedures for the above conditions, including
  - a) Intra-abdominal abscess
  - b) Ileus
  - c) Anastomotic leak
  - d) Bowel obstruction

## **GERD, hiatal hernia, and achalasia surgical management and postoperative care**

- 1) Interpret the results of clinical evaluations (history, physical examination) performed on patients being evaluated with the above conditions to prioritize initial management including
  - a) Control of pain
  - b) Volume and electrolyte resuscitation
  - c) Nutritional support
- 2) Determine the optimal diagnostic approach to evaluate patients with the above clinical conditions to achieve the following goals
- 3) Use the results of the diagnostic imaging studies to determine the treatment options for the above clinical conditions.
- 4) Interpret the results of postoperative monitoring to manage patient recovery after procedures for the above conditions
- 5) Interpret the results of postoperative monitoring to identify complications after procedures for the above conditions, including

## **Responsibilities & expectations**

- 1) See service and consult patients daily on rounds with the team to discuss status, formulate management plans and anticipate discharge planning
- 2) Review all patient imaging studies and reports with the team and a radiologist as appropriate, particularly studies performed at other facilities.
- 3) Use Apex for patient tracking and sign-out.
- 4) Promptly notify the service chief resident and/or attending of changes in patient status as directed by
  - a) The rules of UCSF
  - b) The rules of the Surgery Service Manual, including
    - i) any change in the level of care.
    - ii) any patient who vomits more than once within 12 hours
    - iii) any patient who requires more than one fluid bolus within 12 hours
    - iv) any drop in hematocrit >3 units
    - v) any patient with abnormally changed vital signs. The most common error is hypotension (SBP<90) mis-attributed to an epidural, when in fact the patient is bleeding.

## **Medical knowledge**

### **Goals & objectives**

#### **Bariatric**

- 1) Understand the 1991 NIH consensus criteria for surgical management of morbid obesity
- 2) Understand the impact of the following comorbidities of obesity, including the impact on the risk of bariatric procedures
  - a) pulmonary hypertension
  - b) CHF
  - c) coronary artery disease
  - d) sleep apnea
  - e) hypoxemia/hypoventilation syndrome
  - f) asthma
  - g) hyperlipidemia/hypercholesterolemia
  - h) diabetes/insulin resistance
  - i) venous stasis
  - j) GERD
  - k) DJD

- 3) Describe the benefits of bariatric surgery in terms of
  - a) Weight loss
  - b) Life expectancy
  - c) Quality of life
  - d) Resolution of comorbidities

### **Gallbladder**

- 1) Understand the prevalence and natural history of gallstones and the pathophysiology of gallstone formation.
- 2) Understand acalculous cholecystitis
- 3) Understand choledocholithiasis and the common complications including
  - a) acute cholangitis
  - b) biliary pancreatitis
- 4) Differentiate choledocholithiasis and from cholelithiasis.
- 5) Be familiar with signs and symptoms of
  - a) cholelithiasis
  - b) biliary colic
  - c) acute cholecystitis
  - d) chronic cholecystitis
- 6) Understand the following treatment options for gallstones including indications and contraindications
  - a) ERCP
  - b) Cholecystectomy versus Cholecystostomy

### **Acute Abdomen**

- 1) Understand the pathophysiology of acute appendicitis
- 2) Understand the classic signs and symptoms of acute appendicitis
- 3) Contrast the signs and symptoms of classic appendicitis with the signs and symptoms of the most common conditions included in the differential diagnosis, including
  - a) UTI
  - b) Renal colic
  - c) Gynecologic conditions (PID, TOA, ectopic pregnancy, endometriosis, ruptured luteal cyst)
  - d) Mesenteric lymphadenitis
  - e) Peptic ulcer disease
  - f) Cecal diverticulitis or cancer
  - g) Sigmoid diverticulitis
- 4) Understand the methods of diagnostic evaluation, including indications for
  - a) CT scan
  - b) Ultrasound
  - c) MR
  - d) diagnostic laparoscopy
- 5) Understand the complications of appendicitis
  - a) perforation
  - b) abscess formation
  - c) pancreatitis
  - d) fistula
  - e) infertility
  - f) phlegmon
  - g) chronic appendicitis
- 6) Understand the following treatment options for appendicitis in terms of indications, contraindications, risks, benefits, possible complications
  - a) antibiotics
  - b) appendectomy

- c) open vs lap
- d) immediate vs delayed

### **Pancreatitis**

- 1) Understand the etiologies of pancreatitis including
  - a) alcoholic
  - b) biliary
  - c) iatrogenic
  - d) other (hypertriglyceridemia, hypercalcemia, PAN, medications, viruses)
- 2) Understand the diagnostic evaluation of acute pancreatitis and prognostic scoring systems.
- 3) Understand the common complications
  - a) SIRS
  - b) pseudocyst
  - c) pancreatic necrosis
  - d) retroperitoneal abscess
- 4) Understand the initial management of patients with acute pancreatitis, with emphasis on
  - a) fluid resuscitation
  - b) nutrition
- 5) Understand indications for antibiotics
- 6) Understand monitoring for end-organ dysfunction/SIRS
- 7) Understand indications for surgery

### **Small bowel obstruction (SBO)**

- 1) Understand the signs and symptoms of mechanical SBO
- 2) Understand the differences between
  - a) SBO and adynamic ileus
  - b) Complete SBO from partial
  - c) Strangulated SBO from non-strangulated
- 3) Understand diagnostic evaluation of patients presenting with a SBO
- 4) Understand the serious complications of
  - a) Mesenteric or colon ischemia
- 5) Be familiar with the signs and symptoms of ischemic and/or infarcted bowel
- 6) Understand the risk factors and clinical settings when mesenteric ischemia might occur

### **Acute hernia complications**

- 1) Understand the findings that require emergency repair of a hernia

### **Perforated viscus**

- 1) Understand the differential diagnosis of abdominal free air.

### **Complex and/or Reoperative Surgery (including ventral hernia, enterocutaneous fistulas)**

- 1) Ventral Hernias
  - a) Differentiate a simple from a complex ventral hernia
  - b) Understand treatment options with respect to
    - i) laparoscopic vs open
    - ii) need for mesh reinforcement
    - iii) type of mesh used: prosthetic versus biologic
    - iv) separation of components

- 2) Enterocutaneous Fistulas
  - a) Understand a fistula and the common causes
  - b) identify risk factors and factors that prevent fistula resolution

### **Responsibilities & expectations**

Prepare and present clinical patient histories at sign out and during hand offs.

### **Technical skills**

#### **Goals & objectives**

- 1) Competently remove central lines
- 2) Competently remove drains

#### **Responsibilities & expectations**

- 1) Notify service chief of any complications when removing CVC or drains

### **Practice-based learning and improvement**

#### **Goals & objectives**

- 1) Attend weekly service M&M conference .

#### **Responsibilities & expectations**

- 1) Meet with the fellowship director at least once during the rotation.

### **Interpersonal & communication skills**

#### **Goals & objectives**

- 1) Communicate effectively as a member of the multidisciplinary which rounds together
- 2) Communicate effectively with patients and families

#### **Responsibilities & expectations**

- 1) Establish appropriate role in the multidisciplinary team
- 2) Maintain appropriate lines of communication within the care team and across disciplines

### **Professionalism**

#### **Goals & objectives**

- 1) Functions as a licensed independent practitioner.
- 2) Enhance the body of knowledge in advanced practice nursing through exchange of ideas and knowledge in professional organizations, conferences, research activities, and written publications

## **Responsibilities & expectations**

- 1) Adhere to the UCSF Medical Center Mission
- 2) Demonstrate respect, compassion, and integrity
- 3) Provides patient centered care recognizing cultural diversity and the patient or designee as a full partner in decision making

## **Systems-based practice**

### **Goals & objectives**

- 1) Coordinate patient care including discharge and transfer within the health care system

## **Responsibilities & expectations**

- 1) Become proficient in the process of patient transfer to a lower level of care
- 2) Become proficient in the management of a patient through the discharge process
  - a) appropriate documentation of care for the primary physician
  - b) appropriate referral to local specialists for follow-up management of health issues that developed during the UCSF treatment
- 3) Practice cost effective, evidence based health care and resource allocation that does not compromise quality of care