

Colorectal/Bariatric (Green) Surgical Service Goals & Objectives

COLORECTAL/BARIATRIC (“GREEN”) SERVICE: COMMON OBJECTIVES AND EVALUATION TOOLS FOR RESIDENTS AT ALL LEVELS

Domain	Objective	Evaluation Tool
Patient Care	Demonstrate a caring and respectful behavior towards patients and their families	360° evaluation (nurses, patients)
	Gather essential, complete, and accurate information about their patients	Teaching rounds and chart review (chief resident and faculty assessments)
	Demonstrate ability to choose appropriate care interventions based on medical facts, patient preferences, and current scientific evidence	Teaching rounds and chart review (chief resident and faculty assessments)
	Demonstrate ability to counsel and educate patients and their families.	360° evaluation (patients)
	Perform competently the basic procedures expected at their level of training	Skills assessment (resident and faculty evaluations)
	Achieve year-specific learning objectives	Oral exam
	Demonstrate ability to prioritize competing care needs of patients on the service	Resident and faculty evaluations
Medical Knowledge	Demonstrate an understanding of the pathophysiology of diseases encountered in patients on this service	Teaching rounds (chief resident and faculty evaluations)
	Choose appropriate care interventions for patients on the service and support the choices by reference to current literature	Teaching rounds (chief resident and faculty evaluations)
Medical Knowledge	Achieve year-specific learning objectives	Oral exam
Practice-Based Learning and Improvement	Demonstrate ability to analyze their own decisions and performance; describe areas of deficiency and strategies for improvement	Teaching rounds (faculty evaluations)
	Demonstrate use of literature (both text and on-line) to select treatment strategies for patients on the service	Teaching rounds (faculty evaluations)
	Facilitate learning of students on the service	Performance evaluations by students
	Demonstrate overall clinical competence	Faculty evaluations
Interpersonal and Communication Skills	Effectively communicate care plans to patients, families, nurses, and other health care personnel	360° evaluations (patients, nurses, ward clerks, case managers, therapists)
	Teach students the basics of preoperative and postoperative care, writing orders and progress notes	Performance evaluations by students
	Write orders and notes in a coherent, legible fashion	Chart review (faculty); 360° evaluations (nurses, ward clerks)
	Respond promptly and courteously to requests of staff; answer pages promptly	360° evaluations (nurses, ward clerks)
Professionalism	Demonstrate respect for others Display tolerance to others' opinions Display sensitivity to diversity Accept responsibility for own actions Place needs of patients and team above own self-interest Teach and model responsible behavior	360° evaluations (patients, nurses, ward clerks) Student evaluations Faculty evaluations
Systems-Based Practice	Work cooperatively with other disciplines to provide efficient and effective patient care	360° evaluations (nurses, case managers) Chief resident and faculty evaluations

	Demonstrate ability to use pathways and protocols	360° evaluations (nurses, case managers) Chief resident and faculty evaluations
	Demonstrate attention to cost-effective care in ordering tests and planning interventions	360° evaluations (nurses, case managers) Chief resident and faculty evaluations

Green Surgery: Colorectal Surgery Goals

PGY-1 (Intern) Goals

Medical Knowledge

1. Understand the anatomy, histology, and function of the anal canal.
2. Understand the anatomy, histology, and function of the colon and rectum.
3. Understand the pathogenesis of anal abscess/fistulas.
4. Understand the pathogenesis of anal fissures.
5. Understand the anatomy and pathogenesis of hemorrhoidal disease.
6. Understand the viral etiology and natural history of condyloma accuminatum.
7. Understand the anatomy and pathogenesis of pilonidal disease.
8. Understand the anatomy and pathogenesis of hidradenitis suppurativa.
9. Understand the pathogenesis and natural history of anal, rectal, and colon cancer.
10. Understand the progression of normal colonic epithelium to cancer.
11. Understand the epidemiology and natural history of lower GI bleeding.

Patient Care

Bedside/clinic care

1. Understand how to treat acute or chronic perianal abscess/fistulas.
2. Understand the medical and surgical treatment for anal fissures.
3. Understand the medical and surgical treatment options for bleeding hemorrhoids.
4. Understand the surgical management options of condyloma accuminatum.
5. Understand the surgical management options of pilonidal disease.
6. Understand the surgical management options of hidradenitis suppurativa.
7. Learn indications for small bowel follow through, barium enema, abdominal/pelvic CT, and PET scan.
8. Understand the workup of lower GI bleeding.
9. Understand the difference between care for ileostomies and colostomies.

Technical skills

1. Learn how to drain simple and horseshoe perianal abscesses.
2. Learn how to perform fistulotomies or place setons through fistula.
3. Learn how to perform a lateral internal sphincteromy for fissures.
4. Learn how to band a prolapsing internal hemorrhoid.
5. Learn how to excise a mixed internal/external hemorrhoid.
6. Learn how to excise anal condyloma.
7. Learn how to drain pilonidal abscess or incise a pilonidal sinus.
8. Learn how to incise the sinuses of perianal hidradenitis.
9. Learn how to place an NG tube to ruleout an upper source for a lower GI bleed.
10. Learn how to place an ostomy bag.
11. Learn how to perform anoscopy.

Professionalism

1. Be sensitive to a patient's socioeconomic and cultural context.
2. Understand the ethical principles of patient autonomy, informed consent, and advanced directives.

Interpersonal and Communication Skills

1. Learn how to listen and assess nonverbal cues from patients, families and staff.
2. Understand the need for timely communication of adverse events or the results of new studies to senior residents, attending staff, and patients.
3. Learn when nurse phone calls require an immediate patient assessment.
4. Learn how to communicate effectively/compassionately with patients, families, nursing staff, case coordinators, social workers, senior residents, and attending staff.
5. Learn to efficiently sign-out patients to other teams.

Practice-based learning

1. Understand when an adverse event occurs and the need to modify bedside care to treat the problem and prevent future occurrences.
2. Attend morbidity and mortality conferences and understand how senior residents make practice changes after adverse events.

Systems-based practice

1. Understand and use clinical pathways for postop care of colorectal surgery patients.
2. Learn to utilize case coordinators to provide cost-effective, but quality healthcare.
3. Understand the role of diagnostic radiologists, interventional radiologists, radiation oncologists, medical oncologists, and gastroenterologists in the multidisciplinary care of the colorectal patient.

PGY-3 (Junior Resident) Goals

All intern goals as well as these Junior Resident specific goals.

Medical Knowledge

1. Understand the differences between Crohn's disease and Ulcerative Colitis.
2. Understand the epidemiology and natural history of cecal/sigmoid volvulus.
3. Understand the epidemiology and natural history of sigmoid diverticulitis
4. Understand the pathophysiology of Ogilvie's syndrome.
5. Understand the pathophysiology of enterocutaneous fistulas.
6. Learn indications for genetic screening of families of FAP/HNPCC/MYH patients.

Patient Care

Bedside/clinic care

1. Understand the medical management of inflammatory bowel disease.
2. Understand complications of inflammatory bowel disease requiring surgical interventions.
3. Understand the surgical options for Crohn's and Ulcerative Colitis.
4. Understand the staging of anal, rectal, and colon cancer.
5. Learn indications for screening or diagnostic colonoscopy.
6. Understand the management of enterocutaneous fistulas.

Technical skills

1. Learn how to efficiently lyse abdominal adhesions
2. Learn how to perform a small bowel resection for either Crohn's disease or an enterocutaneous fistula.
3. Learn how to perform stricturoplasty.
4. Learn how to mobilize the hepatic or splenic flexures.
5. Learn how to ligate the ileocolic artery and the inferior mesenteric vessels.
6. Learn how to identify the left and right ureters.
7. Learn how to do a right, left, or sigmoid colectomy.
8. Learn how to perform colonoscopy by the one-person and two-person methods.
9. Learn how to perform rigid proctosigmoidoscopy.

Professionalism

1. Learn how to communicate effectively/courteously as consultant.

Interpersonal and Communication Skills

1. Learn how to coordinate care with primary team.
2. Learn how to give bad news to family members.
3. Learn to counsel patients re: operative risks.

Practice-based learning

1. Learn to recognize adverse events in the intensive care unit or operating room, to correct the problems, and to prevent future recurrences.

Systems-based practice

1. Learn when to consult gastroenterology, medical oncology, and/or radiation oncology in the management of anal, rectal, and colon cancer.
2. Understand the multidisciplinary approach to inflammatory bowel disease.

PGY-5 (Chief Resident) Goals

All intern and junior resident goals as well as these Chief Resident specific goals.

Medical Knowledge

1. Understand the nervous, lymphatic, vascular, and nearby genitourinary structures that may be injured during a proctectomy.
2. Understand the indications for subtotal colectomy in familial colorectal syndromes.
3. Understand the indications for restorative total proctocolectomy in inflammatory disease.
4. Understand the indications for a protective diverting ileostomy.
5. Understand the pathophysiology of surgically correctable constipation.
6. Understand the anatomy and pathogenesis of anal sphincter defects.
7. Understand the workup of constipation and fecal incontinence.
8. Understand the anatomy and pathogenesis of rectal prolapse.
9. Understand the advantages and disadvantages of a double-stapled anastomosis vs. a hand-sewn anastomosis.
10. Understand the indications for rectal mucosectomy.
11. Understand the indications for intersphincteric proctectomy.
12. Understand the indications and contraindications for laparoscopic colectomy.

Patient Care

Bedside care

1. Learn to recognize deviations from normal postop course and what studies or interventions are needed for each problem.
2. Learn the details of the fast-track pathway for patient care after bowel resection.

Technical skills

1. Learn how to do an open restorative proctocolectomy.
2. Learn how to do an open subtotal colectomy.
3. Learn how to perform right and total abdominal colectomy by laparoscopic technique.
4. Learn how to do a coloanal anastomosis.
5. Learn how to construct an ileal-J pouch.
6. Learn techniques to enable an ileal-J pouch to reach the anus.

Professionalism

1. Learn to coordinate consultant care for service patients.
2. Understand the need to model conscientious, ethical, and culturally sensitive behavior for the junior residents.

Interpersonal and Communication Skills

1. Learn how to speak with patient families after an operation.
2. Learn how to counsel patients and families after adverse events.
3. Learn to formulate a daily and long-term patient management plan and delegate responsibilities to junior residents.
4. Learn to respectfully disagree with attendings if there is some concern about patient management.

Practice-based learning

1. Within the public context of M&M conference, recognize adverse events, why they happened, how to manage them, and how to prevent them.
2. Use the literature to guide M&M presentations.

Systems-based practice

1. Learn to coordinate consultant care for ICU and ward patients.
2. Learn to propose various postop care plans depending on insurance/socioeconomic restraints.

PGY-1 (Intern) Objectives

Medical Knowledge (evaluated by end-of-service oral exam)

1. Describe the anatomy, histology, and function of the anal canal.
2. Describe the anatomy, blood supply, and lymphatic drainage of the colon and rectum.
3. Contrast the different type of anal fistulas.
4. Differentiate between internal and external hemorrhoids.
5. Describe the cause and natural history of anal condyloma, and indicate how HIV status affects the natural history.
6. Describe the cause of pilonidal disease.
7. Describe how perianal hidradenitis suppuritiva occurs.
8. Differentiate the histology and epidemiology of anal, rectal, and colon cancer.
9. List the causes of lower GI bleeding.

Patient Care

Bedside/clinic care (evaluated by end-of-service oral exam)

1. Describe how to drain an acute perianal abscess.
2. List the surgical options for chronic anal fistulas.
3. Contrast the medical and surgical options for internal and external hemorrhoids.
4. Describe the surgical treatment and the indications for biopsy of perianal condyloma.
5. List the advantages and disadvantages of excision vs. incision for pilonidal disease.
6. Cite the indications for small bowel follow through, barium enema, abdominal/pelvic CT, and PET scan.
7. Describe an algorithm to treat stable or unstable lower GI bleeding.
8. Contrast the anatomic and physiologic differences between ileostomies and colostomies.

Technical skills (evaluate by faculty on performance rating form)

1. Demonstrate an incision/drainage of an acute perianal abscess
2. Perform a posterior midline fistulotomy and bilateral counterdrainage for a horseshoe perianal abscess.
3. Perform a lateral internal sphincterotomy.
4. Band an internal hemorrhoid in clinic.
5. Excise a mixed internal/external hemorrhoid after obtaining adequate vascular control.
6. Excise large anal condyloma, while fulgurating smaller ones.
7. Incise a pilonidal sinus.
8. Place an NG to r/o an upper source of a lower GI bleed.
9. Assist enterostomal nurse in placing an ileostomy bag.
10. Perform diagnostic anoscopy in clinic.

Professionalism (360 evaluation by residents/nurses)

1. Courteously communicate with patients and nursing staff re: diagnostic plans for the day.
2. Obtain informed consent from patients.
3. Inquire whether a patient has an advanced directive or power of attorney.

Interpersonal and Communication Skills (360 evaluation by residents/nurses)

1. Notify senior residents and attendings in a timely fashion about any adverse events or the results of diagnostic tests.
2. Describe criteria for immediate patient assessment after a nursing phone call.

Practice-based learning (evaluation by oral exam)

1. Describe periop practices to minimize wound infections and anastomotic leak.
2. Perform literature searches to review advances in care of the colorectal surgery patient.

Systems-based learning (evaluation by oral exam and by 360 evaluation)

1. Describe how the clinical pathways streamline blood testing and dietary changes postop.
2. Communicate with case coordinators re: patients' postop needs.
3. Describe the role of diagnostic radiologists and interventional radiologists for a patient with an intra-abdominal abscess.
4. Describe the role of a gastroenterologist in a lower GI bleed.
5. Contrast the roles of medical oncology and radiation oncology in colon and rectal cancer.

PGY-3 (Junior Resident) Objectives**Medical knowledge (evaluated by oral exam)**

1. Contrast Crohn's disease and ulcerative colitis.
2. Describe the epidemiology and presentation of cecal and sigmoid volvulus.
3. Compare the natural history of diverticulitis.
4. Describe the epidemiology and pathophysiology of Ogilvie's syndrome.
5. Describe the electrolyte/fluid disturbances of high and low enterocutaneous fistulas.
6. List the indications for genetic screening a patients with a family history of cancer. State what genes are associated with FAP/ HNPCC/MYH syndromes.

Patient care**Bedside/clinic care (evaluated by oral exam)**

1. Describe the medical management of acute terminal ileitis or ulcerative colitis.
2. List the indications for operative management of Crohn's disease or ulcerative colitis.
3. Name the operations for ulcerative pancolitis, Crohn's terminal ileal disease, multiple Crohn's strictures, and a Crohn's rectovaginal fistula.
4. Compare the staging for anal, rectal, and colon cancer.
5. List the indications for screening or diagnostic colonoscopy.
6. Describe the intervals for surveillance colonoscopy after a normal exam, a small adenoma, a large villous adenoma, multiple (>3) adenomas, and after colonic resection for cancer.
7. Describe the management of enterocutaneous fistulas, both high and low output.

Technical skills (evaluated by faculty on performance rating form)

1. Demonstrate a lysis of adhesions without enterotomy.
2. Perform a small bowel resection.
3. Perform a strictureplasty.
4. Mobilize the hepatic or splenic flexure.
5. Securely ligate the ileocolic or inferior mesenteric vessels, when appropriate.
6. Identify the left ureter prior to ligation of the IMA.
7. Perform a diagnostic colonoscopy by either the one or two-person technique.
8. Perform a rigid proctosigmoidoscopy.

Professionalism (360 evaluation and oral exam)

1. Communicate with the primary team re: colorectal recommendations.
2. Describe how you would obtain consent for a colectomy for cancer in a demented patient.

Interpersonal and communication skills (360 evaluation and oral exam)

1. Compassionately, but accurately give bad news to family members after an adverse event.
2. List the risks for small bowel resection, right hemicolectomy, and sigmoid colectomy.

Practice-based learning (oral exam)

1. Describe ways to prevent postop myocardial infarction, pulmonary embolism, pneumonia, and urinary infection.
2. Describe ways to prevent postop wound infection.

Systems-based practice (oral exam)

1. Contrast the roles of medical oncology and radiation oncology in the management of anal, rectal, and colon cancer.
2. Describe a multidisciplinary approach to ulcerative colitis and Crohn's disease.

PGY-5 (Chief Resident) Objectives

Medical Knowledge (evaluated by oral exam)

1. Describe the nerves, lymphatics, vascular supply, and nearby genitourinary structures that may be injured during proctectomy.
2. List the indications for a subtotal colectomy or proctocolectomy in familial colorectal cancer syndromes.
3. List the indication for a restorative proctocolectomy in ulcerative colitis and contrast that with Crohn's colitis.
4. Give the indications for temporary diverting ileostomy and when you would take it down.
5. Describe the pathophysiology of surgically-correctable constipation and contrast that with obstructed defecation and short-segment Hirschsprung's.
6. Describe the anatomy of the anal sphincter.
7. Contrast the workup of constipation and fecal incontinence.
8. Describe the anatomy and pathophysiology of rectal prolapse.
9. Contrast the advantages of a double-stapled vs. handsewn coloanal anastomosis.
10. Give the indications for a rectal mucosectomy.
11. Give the indications for an intersphincteric proctectomy.
12. List the indications and contraindications for laparoscopic colectomy.

Patient Care

Bedside care (evaluated by oral exam)

1. Describe your algorithm was evaluating anastomotic leak in a small bowel resection, a sigmoid colectomy, an ileorectal anastomosis, or a coloanal anastomosis.
2. Describe the indication to operate for C. diff colitis.
3. Describe your approach to a prolonged postop ileus.
4. List the details on the fast-track pathway for bowel resection.

Technical skills (evaluated by faculty on performance rating form)

1. Perform an open restorative proctocolectomy.
2. Perform an open subtotal colectomy.
3. Perform a right and total laparoscopic colectomy.
4. Perform a double-stapled anastomosis..
5. Perform a handsewn anastomosis.
6. Construct an ileal J pouch.
7. Describe lengthening procedures to enable an ileal J pouch to reach the anus.

Professionalism (360 evaluation)

1. Model culturally sensitive care for your junior residents.
2. Resolve disputes between nursing and junior residents.

Interpersonal and Communication Skills (360 evaluation).

1. Speak with patient families after the operation.

2. Counsel patients and their families after adverse events.
3. Formulate daily patient management plans and delegate as appropriate.

Practice-based learning (evaluated by faculty on performance rating form)

1. Present at M&M, indicating how to mitigate the consequences of adverse events and how to present them in the future.
2. Search the literature for new ways to avoid adverse perioperative events.

Systems-based practice (evaluated by 360 and oral exam)

1. Coordinate consultant care for ward and ICU patients.
2. Propose how socioeconomic/insurance constraints affect a patient requiring postop TPN/IV abx.

Green Surgery: Bariatric Surgery Goals

PGY-1 (Intern) Goals

Medical Knowledge

1. Understand the term BMI and its various definitions, including overweight, obese, morbidly obese, and super-obese
2. Know indications for bariatric surgery as outlined by NIH consensus criteria
3. Know co-morbidities associated with obesity and their response rates to bariatric surgery
4. Understand the term excess body weight and percent excess weight loss, and overall weight loss results of bariatric surgery expressed in these terms
5. Understand the anatomy and mechanism of action of the core bariatric operations (gastric bypass, gastric banding, sleeve gastrectomy, and biliopancreatic diversion with or without duodenal switch). Understand the terms restrictive and malabsorptive and to which operations they apply
6. Understand the putative mechanisms of resolution of diabetes after gastric bypass, including the incretin theory and the paradigmatic incretins GLP-1 and GIP and their putative stimuli for secretion and mechanisms of action.
7. Understand the genetic contribution to obesity-what percent of the tendency toward obesity or leanness is genetic? What data supports this number?
8. Understand the putative pathophysiologic mechanisms of obesity, including disorders of satiety, thermogenesis, and lipid metabolism
9. Understand the role of leptin in the pathophysiology of obesity and its mechanism of action and stimulatory and inhibitory feedback mechanisms
10. Understand the biochemical mechanism of uncoupling of oxidative phosphorylation from electron transport in mitochondria and its relation to the pathogenesis of obesity. Understand the role of uncoupling proteins in this process

Patient Care

Bedside/Clinic Care

1. Know common post-operative complications that occur in bariatric patients & how to recognize them
2. Understand the principles of post-operative diet in the early and late postoperative periods after bariatric surgery
3. Know how to assess nutritional and psychological status of bariatric patients post-operatively in the outpatient setting

Technical Skills

1. Learn the proper techniques for the use of electrocautery, suturing, and tying in laparoscopic surgery.

Professionalism

1. Understand how to counsel patients regarding risks, benefits, and alternative to surgery for obesity.
2. Understand the relative contributions of genetics, environment, and “willpower” in the development of obesity
3. Be familiar with long-term success rates and degree of weight loss for dietary weight loss in obese patients

Interpersonal and Communication Skills

1. Learn the basic concepts of bariatric sensitivity, including an understanding of the genetic basis of obesity, appropriate terminology for communicating with obese patients and special needs of obese patients in inpatient and outpatient settings

Practice-based learning

1. Understand the technical principles of gastric band adjustment in the clinic and ED
2. Understand the basics of laparoscopic access and laparoscopic suturing and tying

Systems-Based Practice

1. Understand the multidisciplinary evaluation necessary to assess operative risk of bariatric patients.
2. Understand and use pre and postoperative bariatric pathways.

PGY-1 (Intern) Objectives

Medical Knowledge (evaluated by oral exam)

1. Describe indications for bariatric surgery and expected weight loss
2. Describe co-morbidities associated with morbid obesity and their response rates to bariatric surgery
3. Sketch each of the common bariatric operations and describe how they result in weight loss
4. Describe the mechanisms that underlie the pathophysiology of obesity, weight loss after bariatric surgery, and the resolution of diabetes after gastric bypass
5. Describe the role of leptin in regulating satiety

Patient Care

Bedside/Clinic Care

1. Demonstrate an ability to recognize the common postoperative complications that occur in bariatric patients and implement their diagnostic workup and management
2. Demonstrate an ability to manage the post-operative diet in bariatric surgery patients in both inpatient and outpatient settings

Technical Skills

1. Demonstrate proper knot-tying, suturing, and use of the cautery in both open and laparoscopic environments in the operating room and the skills lab.

Professionalism

1. Demonstrate an ability to interact with clinical consultants for bariatric surgery patients, including endocrinologists, dietitians, physical therapists, psychologists, and primary care physicians
2. An obese patient presents to your clinic in tears, stating that she has tried all her life to lose weight, and has failed every time, and that this makes her feel like a failure as a person. How do you respond?

Interpersonal and Communication Skills

1. Demonstrate an ability to interact with the bariatric surgery patient utilizing the basic principles of bariatric sensitivity, including an understanding of the genetic basis for obesity and the appropriate terminology and infrastructure required for care of the obese patient.

Practice-Based Learning

1. Demonstrate an ability to perform lap band adjustments in the clinic and ED
2. Demonstrate an ability to gain laparoscopic access in the OR and laparoscopic suturing and tying in the skills lab

Systems-Based Practice

1. Describe the pathologic findings in the cardiac, pulmonary, endocrine, and renal systems of obese patients and the laboratory studies necessary to evaluate the severity of these conditions.
2. Demonstrate the ability to use bariatric pathways for inpatients after surgery

PGY-3 (Junior Resident) Goals

All of PGY-1 plus

Medical Knowledge

1. Understand the advantages & disadvantages of the commonly performed bariatric procedures with regards to metabolism and nutrition.
2. Understand Roux limb anatomy and standard and bariatric terminology for Roux limbs
3. Understand the concept of bile reflux gastritis and its surgical treatment/prevention
4. Understand the pathogenesis of marginal/anastomotic ulcer formation after gastric bypass and its treatment
5. Understand the pathophysiology of calcium oxalate stones after gastric bypass
6. Understand common nutritional deficiencies associated with bariatric surgery and their presentation and management.
7. Understand the pathogenesis of cholelithiasis after bariatric surgery and its prevention and management; what is the role of prophylactic cholecystectomy during bariatric surgery?

Patient Care

Bedside/Clinic Care

1. Understand the preoperative assessment of morbidly obese individuals undergoing bariatric surgery.
2. Understand the presentation, diagnostic workup, and management of the common acute post-operative complications occurring in bariatric patients including anastomotic leak, bowel obstruction, pulmonary embolism, atrial fibrillation, wound infection, dehiscence, congestive heart failure, pneumonia, and sepsis.

Technical Skills

1. Develop proficiency in attaining central venous access for morbidly obese individuals.
2. Understand principles and techniques of performing panniculectomy, abdominal wall hernias, and open bariatric procedures.
3. Understand the technical skills and tools required for gastric band adjustment

Professionalism

1. Understand the basic principles, terminology, and concepts required to act as a bariatric surgery consultant to referring primary care providers and endocrinologists
2. Understand the basic principles, terminology, and concepts required to coordinate preoperative and postoperative care for bariatric surgery patient with referring primary care providers and endocrinologists

Interpersonal and Communication Skills

1. Understand the indications for immediate notification of attending surgeon and interventions in the case of a postoperative bariatric patient who is suffering from complications; understand the threshold for notifying attending and for operative or other intervention

Practice-based learning

1. Understand the principles of establishing laparoscopic access and pneumoperitoneum in obese and lean patients

Systems-Based Practice

1. Understand the multidisciplinary evaluation necessary to assess operative risk of bariatric patients.

PGY-3 (Junior Resident) Objectives

All of PGY-1 plus

Medical Knowledge

1. Demonstrate an understanding of the metabolic and nutritional consequences of commonly performed bariatric procedures and how to diagnose and treat them.
2. Demonstrate an ability to carry out diagnostic workup and therapeutic management of the bariatric surgery patient who presents with nutritional disorders after surgery
3. Demonstrate an ability to carry out diagnostic workup and therapeutic management of the bariatric surgery patient who presents with ulcer disease after surgery

Patient Care

Bedside/Clinic Care

1. Describe the preoperative assessment of morbidly obese individuals undergoing bariatric surgery.
2. Given a patient scenario, list the common postoperative complications of bariatric operations and describe their diagnostic workup and treatment.
3. Describe common dynamics operant in the families of obese individuals.

Technical Skills

1. Demonstrate ability to perform central venous line without complication in a morbidly obese individual.
2. Describe the techniques for creation of a Roux limb; demonstrate an ability to suture, tie, and run bowel in a laparoscopic environment in the operating room
3. Demonstrate an ability to perform outpatient gastric band adjustment
4. Demonstrate an ability to perform Veress and Hasson access of the abdomen for creation of pneumoperitoneum

Professionalism

1. Demonstrate an ability to obtain informed consent for all core bariatric procedures.
2. An obese patient presents to your clinic in tears, stating that she has tried all her life to lose weight, and has failed every time, and that this makes her feel like a failure as a person. How do you respond?

Interpersonal and Communication Skills

1. Demonstrate an ability to communicate expeditiously with attending surgeons in situations when bariatric surgery patients are suffering acute postoperative or late complications
2. Demonstrate an understanding of when intervention, diagnostic or therapeutic, is necessary in bariatric surgery patients who are suffering acute postoperative or late complications

Practice-Based Learning

1. Demonstrate an ability to obtain safe laparoscopic access and pneumoperitoneum and laparoscopic suturing and tying in obese and lean patients in the operating room
2. Demonstrate an ability to perform safe laparoscopic cholecystectomy with cholangiogram in the bariatric surgery patient

Systems-Based Practice

1. Describe the multi-disciplinary approach to bariatric surgery patients; what specialized personnel are required for preoperative and postoperative care?

PGY-5 (Chief Resident) Goals

All of PGY-1, PGY3, plus

Medical Knowledge

1. Understand anatomical aspects of the Roux-en-Y gastric bypass, e.g., length of common channel, length of Roux limb, antecolic vs. retrocolic and their consequences.
2. Understand the pathophysiology of band slippage, methods of prevention at primary operation, and clinical presentation, diagnosis, and treatment
3. Demonstrate a detailed understanding of vagal nerve anatomy and gastric anatomy and blood supply
4. Describe dumping and its putative mechanisms; distinguish between early and late dumping, and understand the suspected role of gut hormones in its pathogenesis
5. Describe the acute and late complications of gastric bypass and gastric banding, their pathophysiology, diagnosis and treatment
6. Describe the anatomy, types, and management considerations for internal hernia after gastric bypass
7. Describe the differential diagnosis and diagnostic workup for abdominal pain after gastric bypass in the early and late postoperative periods
8. Describe the role of gastric banding and gastric bypass on GERD and esophageal motility
9. Understand the mechanisms of weight regain and weight loss failure after bariatric surgery and the principles of management
10. Be able to read and critically assess the bariatric literature

Patient Care

Bedside/Clinic Care

1. Know how to evaluate and recommend options for treatment for failures and complications of bariatric surgery.

Technical Skills

1. Perform gastric band placement
2. Perform laparoscopic creation of Roux limb

Professionalism

1. Understand the basic principles of bariatric sensitivity in communicating with obese patients and families
2. Understand how to effectively communicate information about complications after bariatric surgery to patients and families

Interpersonal and Communication Skills

1. Understand the common complications that affect bariatric surgery patients and how to best communicate their occurrence and management to patients and families
2. Understand the multidisciplinary requirements of bariatric surgery patients in inpatient and outpatient settings, in routine and adverse clinical courses, and how to manage the multidisciplinary team

Practice-Based Learning

1. Be able to present & discuss complications of bariatric surgery at Morbidity & Mortality Conference, including causes and prevention.

Systems-Based Practice

1. Understand the multidisciplinary aspects of care for the bariatric surgery patient in inpatient and outpatient settings
2. Understand the basics of insurance payment for bariatric surgery, its limitations, and the effect of bariatric surgery on nationwide healthcare economics; are health care costs recouped after bariatric surgery as a result of improvement in co-morbid diseases? How long does it take to recoup costs? Is lifespan extended? Are cancer risks reduced?

PGY-5 (Chief Resident) Objectives

All of PGY-1, PGY3, plus

Medical Knowledge (evaluated by oral exam)

1. Describe rationale for expected outcome of anatomical differences in the conduct of the Roux en-Y gastric bypass (length of common channel or Roux limb, antecolic vs. retrocolic anastomosis).
2. Critique the strengths & weaknesses of a given article in the bariatric literature.
3. Demonstrate an ability to carry out diagnostic workup and therapeutic management of the gastric bypass patient who presents with abdominal pain after surgery in peri-operative and late postoperative periods.
4. Demonstrate an ability to carry out diagnostic workup and therapeutic management of the gastric band patient who presents with pain after surgery in both peri-operative and late postoperative periods.
5. Demonstrate an ability to carry out diagnostic workup and therapeutic management of the bariatric surgery patient who presents with weight regain after surgery

Patient Care

Bedside/Clinic Care (evaluated by oral exam)

1. Describe methods of evaluate for failures and complications of bariatric surgery such as malnutrition, inadequate weight loss, excessive weight loss, vomiting, acute abdominal pain, bowel obstruction.
2. Describe the management of suspected anastomotic leak after open and laparoscopic gastric bypass
3. Describe the presentation of band slippage and its diagnosis and management

Technical Skill (evaluated by faculty on performance rating form)

1. Demonstrate satisfactory performance of open Roux-en-Y gastric bypass and/or duodenal switch.
2. Demonstrate the ability to create a Roux limb in a laparoscopic and open environment
3. Demonstrate satisfactory performance of a panniculectomy and abdominal wall hernia repair.

Professionalism

1. An obese patient presents to your clinic in tears, stating that she has tried all her life to lose weight, and has failed every time, and that this makes her feel like a failure as a person. How do you respond?

Interpersonal and Communication Skills

1. Speak with bariatric patient families after operation.
2. Counsel patients and their families after adverse events following bariatric surgery
3. Formulate daily bariatric patient management plans and delegate as appropriate.

Practice-Based Learning (evaluated by faculty rating performance)

1. Demonstrate the ability to present a bariatric-related complication at Morbidity & Mortality Conference in a satisfactory fashion as judged by faculty evaluators.
2. Demonstrate the ability to perform a laparoscopic exploration and repair of internal hernia defects after bariatric surgery

Systems-Based Practice

1. Coordinate consultant care for bariatric surgery patients in both inpatient and outpatient settings
2. Become familiar with the multiple steps required for bariatric surgery insurance authorization