Clinical Teaching Unit # 6 (CTU # 6) - Benign Upper GI, Bariatric Surgery, Endoscopy

Rotation Description: CTU # 6 is staffed by Dr. Boris Zevin and Dr. David Robertson. The emphasis of the clinical experience on CTU # 6 is on Bariatric Surgery, Benign Upper GI Surgery, and Endoscopy.

Medical Expert

1. Bariatric Surgery
   a. Understand the pathophysiology, epidemiology, natural history of morbid obesity
   b. Understand contemporary options for management of morbid obesity
      i. Indications for medical management of morbid obesity
      ii. Indications for surgical management of morbid obesity
   c. Understand entire spectrum of obesity related medical comorbidities and which of these comorbidities are modifiable with surgical management of morbid obesity
   d. Understand roles and importance of each member of the multidisciplinary team at Kington Bariatric Centre of Excellence
   e. Understand normal physiology and anatomy of the upper GI tract
   f. Understand and be able to discuss advantages and disadvantages of available surgical options for management of morbid obesity (gastric bypass, gastric band, sleeve gastrectomy, duodenal switch, intragastric balloon, novel endoluminal therapies)
   g. Understand typical post-surgical anatomy following bariatric surgery
   h. Understand surgical options for revision and conversion post primary bariatric surgery
   i. Describe and be able to demonstrate operative approach for primary bariatric procedures (gastric bypass and sleeve gastrectomy)
   j. Understand and demonstrate appropriate diagnosis and management of common post-operative bariatric surgery complications:
      i. Anastomotic leak
      ii. Anastomotic stricture
      iii. Post-operative hemorrhage (intraluminal and intraabdominal)
      iv. Early mechanical intestinal obstruction (Roux limb, biliopancreatic limb, common channel)
      v. Port-site hernia
      vi. Internal hernia
      vii. Nutritional deficiencies / malnutrition

2. Benign Upper GI Surgery
   a. Understand the pathophysiology, epidemiology, natural history and surgical options for management of gastroesophageal reflux disease
   b. Understand the pathophysiology, epidemiology, natural history, classification and surgical options for management of hiatal / paraesophageal hernias
   c. Understand the pathophysiology, epidemiology, natural history, and classification for primary motility disorders of the upper GI tract
a. Achalasia
b. Scleroderma
c. Diffuse esophageal spasm
d. Demonstrate appropriate pre-operative assessment and work-up for patients with GERD
e. Demonstrate appropriate pre-operative assessment and work-up for patients with hiatal / paraesophageal hernias
f. Describe advantages and disadvantages, as well as types of complete and partial fundoplication for management of GERD
g. Describe and be able to demonstrate operative approach for:
   a. Laparoscopic Nissen fundoplication
   b. Laparoscopic Toupet fundoplication
   c. Laparoscopic Dor fundoplication
   d. Laparoscopic paraesophageal hernia repair with and without fundoplication
   e. Acute gastric volvulus
h. Understand and demonstrate appropriate diagnosis and management of common post-operative complications following benign upper GI surgery:
   a. Acute herniation of fundoplication into mediastinum
   b. Esophageal and/or gastric perforation
   c. Dysphagia
   d. Gastroparesis
   e. Gas bloat
i. Describe work-up, medical and surgical management options for patients with recurrent upper GI symptoms post previous hiatal hernia repair with/without fundoplication

3. Endoscopy of the Upper GI Tract
   a. Understand indications and contraindications for diagnostic upper endoscopy
   b. Understand indications and contraindications for therapeutic upper endoscopy
      a. PEG tube +/- jejunal extension insertion
      b. Endoscopic balloon dilation
      c. Endoscopic banding
      d. Radiofrequency ablation
      e. Endoscopic mucosal resection
      f. Endoscopic stent placement
      g. Endoscopic clip placement
   c. Recognize common pathologies of upper GI tract (esophageal and gastric neoplasia, esophageal and gastric varices, esophagitis, Barrett’s esophagus, gastric polyps, GAVE, celiac disease, hiatal hernia, peptic ulcer disease, Cameron’s ulcers)
d. Perform diagnostic upper endoscopy
e. Perform components of therapeutic upper endoscopy
Technical Competencies

1. At the end of this rotation the Senior/Chief Residents will be able to:
   a. Competently undertake endoscopic procedures of the upper GI tract diagnostic and some therapeutic
   b. Competently perform a laparoscopic enteroenterostomy as part of a Roux-en-Y gastric bypass
   c. Competently perform a laparoscopic sleeve gastrectomy
   d. Competently reduce an internal hernia and repair mesenteric defects using a laparoscopic approach
   e. Assist with and/or perform a laparoscopic Nissen fundoplication
   f. Assist with a laparoscopic paraesophageal hernia repair
   g. Assist with creation of the gastric pouch and gastrojejunal anastomosis as part of gastric bypass procedure

Communicator

1. Establish a therapeutic relationship with the patient and the family recognizing the importance of understanding, trust, respect, empathy and confidentiality.
2. Obtain a complete history of the presenting bariatric and benign upper GI surgical problems including the patient's beliefs, concerns and expectations while considering important factors such as age, gender, cultural, spiritual and socio-economic background.
3. Listen effectively, allowing the patient to participate in the decision making process of the therapeutic plan.
4. Cooperate and communicate effectively with other members of the health care team including multidisciplinary team at Kingston Bariatric Centre of Excellence.
5. Demonstrate skill in communicating with others that have different ethno-cultural backgrounds, as well as demonstrate an approach to an angry and hostile patient or families.

Collaborator

1. Consult with members of multidisciplinary bariatric team and other specialists in the care of patients with morbid obesity
2. Consult with health care professionals, specifically gastroenterologists, in the care of patients with benign upper GI diseases
3. Contribute and takes a leadership role in the multidisciplinary team, if appropriate.
4. Be able to describe the role of all members of multidisciplinary bariatric team.
5. Bring the same attributes to both the clinical setting, research and quality assurance settings.

Leader

1. Participate in a leadership role in the discharge planning of patient post-surgery.
2. Utilize health care resources efficiently and cost-effectively to balance patient care, research and education.
3. Incorporate considerations of risk-benefit analysis in patient care
4. Demonstrate the ability to work effectively and cooperatively in a health care team environment on ward activities and in the operating room environment to enhance patient safety and improve patient care.
5. Use technology to optimize patient care, life-long learning and other clinically related activities.
6. Participate in identifying systems errors and in implementing potential systems solutions

Health Advocate

1. Be able to identify important determinants of health affecting patient’s health.
2. Contribute effectively to improve the health of patients and communities
3. Respond to situations in which advocacy is appropriate for the patient, the profession and society in general, such as smoking cessation and obesity control.
4. Understand the role and function of support groups for patients with morbid obesity.

Scholar

1. Use evidenced based practice to insure optimal and evidence-based patient care
2. Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems
3. Participate in the education of patients, families, students, residents and other health professionals, as documented by evaluations of resident’s teaching abilities by faculty and/or learners
4. Contribute to the development of new knowledge thought scholarly activity.

Professional

1. Deliver the highest quality care with integrity, honesty and compassion.
2. Adhere to ethical principles by practicing patient-centered care that encompasses confidentiality, respect and autonomy via appropriate informed consent and shared decision making.
3. Demonstrate cultural competence, by being sensitive and responsive to a diverse patient population as well as colleagues, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.
4. Exhibit appropriate personal and interpersonal professional behaviour.
5. Practice surgery with the ethical consistency and obligation of a Medical Professional.
6. Identify strengths, deficiencies and limits in one’s knowledge and expertise.