Obesity and the General Surgeon

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Overview

- Disease patterns
  - Malignancy
  - Hemia
  - Other
- Perioperative care
- Outcomes
Obesity is a risk for malignancy

Colorectal
Oesophageal
Pancreas
Breast
Thyroid
Obesity and cancer

- worse prognosis
  - recurrence
  - cancer related mortality
- negatively affects delivery of systemic therapy
- contributes to morbidity of cancer treatment
Obesity and hernias
Hiatus hernia
Other conditions

- Gallstones
- Diverticulitis
- Soft tissue infections / abscess
Surgical challenges

- Preoperative
- Intraoperative
- Postoperative
Preoperative issues in obesity

- Obesity related comorbidities
  - Medical optimisation
- Diagnostic workup ?
- Preoperative weight loss ??
Intraoperative issues

- Equipment
- Anatomy
- Physiology
Operating room

- High weight capacity table
- Hovermatt® transfer system
- Secure patient to bed
  - Bean bag
Surgical equipment

- Additional ports
- Extended length
  - laparoscopy trays
  - staplers
  - energy devices
  - ports
Laparoscopic issues

- Abdominal wall thickness
- Thickened, shortened mesentery
- Large heavy omentum
- Hepatic steatosis
Loss of range of motion
Perioperative - other

- Antibiotic prophylaxis
- DVT prophylaxis
- Pressure care
Postoperative care

- DVT prophylaxis
- Aggressive mobilisation
- Nutrition
- Monitoring for complications
Protein deficiency and obesity

- Can be overweight and malnourished
- 30% of hypoalbuminemic patients are obese

Dietch 2015 Surg Obes Relat Dis.
Monitoring for complications

- Clinical signs of complications masked / delayed
- Thicker abdominal wall
  - Peritonitis (or absence) more difficult to diagnose
  - Appearance of wound infection delayed
Complications

- Surgical site infection
  - Blood loss
  - Operative time
  - Technical difficulties
  - Reduced tissue perfusion
  - Hyperglycaemia
  - Wound tension
Lap colectomy

- Longer operating time
- Higher rates of conversion
  - Unclear anatomy
  - Bleeding
  - Exposure
  - Pathology – adhesions, tumour size
- Leak rate / LOS / node harvest / survival not different

Zhou 2012 Surg Endosc
Martin 2011 Clin Colon Rectal Surg
Survival – “the obesity paradox”

Mullen JT 2009 Ann Surg
Emergency surgery

- different population group to elective surgery
  - broader demographic
  - more comorbid illness
Emergency Surgery

- Higher morbidity
  - Longer LOS
  - More frequent and longer ICU
  - More reoperations
- Higher mortality
- Minimal opportunity for
  - Preoperative selection
  - Optimization

Becher 2011 Am Surg
Küpper 2015 Can J Surg
Discrimination / negative attitudes

- No evidence to
  - excluding patients from surgery
  - force patients to lose weight prior to surgery
Summary

- All surgeons encounter obese patients requiring surgery
- Altered disease patterns
- Modifications in care
- Obesity alone is not a prohibitive risk factor for elective general surgery
Stomas in the obese

- Increased thickness abdominal wall
  - Trauma / friction
- Adequate mobilisation
- Remove bulky epiploic appendages
- Higher on abdominal wall
- Use antimesenteric border only
- Is the risk of anastomosis lower than the risk of stoma complication
- Alexis retractor
  - Flattens
  - Reduced friction
  - Separate and remove inside ring first