“TIPS and TRICKS” on Operating in Morbidly Obese Patients

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General rules when operating in obese patients

1) Avoid laparotomy if possible

- risk of bleeding, leak, wound complications, and development of incisional hernia higher

- if unavoidable, try to do some part lap to minimize length of incision

- if unavoidable, minimize lower extent of your incisions
General rules when operating in obese patients

2) Backing out, aborting, and/or selecting other treatment modality is OK

- easier for elective surgeries, gets more difficult with urgent (ex: cancer) and emergent (ex: perforated viscus) cases

- ex: BMI 70 patient with daily symptomatic cholelithiasis
3) If meets criteria, consider weight loss surgery BEFORE the surgery the patient is seeing you for:

- urgency of matter – differentiate between “patient” urgency and true medical urgency

- insurance coverage for WLS

- estimated time to get WLS and be ready for main procedure
General rules when operating in obese patients

4) Proper counseling and documentation in clinic

- INCREASED risk of the standard complications associated with the procedure at hand

- their other options
  - medical or surgical weight loss beforehand
  - if applicable, non-surgical treatment option(s)

- if applicable, the possibility of aborting the procedure
5) Proper instrumentation in the OR

- Use 10 mm scopes (sturdier than 5 mm)
- Have long, bariatric length trocars and laparoscopic instruments available
- For upper abdominal cases
  - use a footboard
  - use a sturdy liver retractor (ex: Nathanson)
  - have a Diamond-Flex™ liver retractor available
General rules when operating in obese patients

6) Proper port placement

- Best method of establishing pneumoperitoneum
  Veress in LUQ → periumbilical → cutdown (epigastric area)

- For thick abdominal wall, need to direct the port to area of interest (instead of perpendicular entry)

- Be mindful that that umbilicus move south and the “viscera landslide” can occur
Proper area for Veress entry
Place ports in direction of “action”
Moving down south...
“Viscera landslide” effect
“Viscera landslide” effect
7) Peri-op considerations

- Lovenox 40mg SC in pre-op holding

- High risk intubation
  - these patients have lower pulmonary reserve
  - anatomically riskier airway
  - higher risk of aspiration
Specific Surgical Procedures
LAPAROSCOPIC CHOLECYSTECTOMY

• ELECTIVE CASES: Avoid converting to open (aborting procedure a better option) → refer out, lose weight, etc.

• EMERGENT CASES: If safe critical view not obtainable, surgical cholecystotomy tube

• Use footboard to get maximum reverse Trendelenberg

• May need Diamond-Flex™ liver retractor (second assistant needed) for added downward retraction and/or liver retraction

• For port placement, avoid the umbilicus and place your lower ports higher up than your typical port location
Lap chole in BMI 50 (symptomatic cholelithiasis)
LAPAROSCOPIC VENTRAL HERNIA REPAIR

• No specific BMI cut off → depends on the (1) BMI, (2) size of hernia defect, and (3) size of hernia sac / content
  - BMI 60, 2 cm defect, plum size defect → OK
  - BMI 60, 3 cm defect, basketball size sac → NOT OK
  - BMI 32, 10 cm defect, school book bag sac → NOT OK

• Bridge repair (unless fascia closes EASILY)

• Definitely use transfascial sutures at the edges, with at least 5 cm overlap from the edge (larger overlap if size of mesh used is > 15 cm in size)
LAPAROSCOPIC INGUINAL HERNIA REPAIR

• ELECTIVE CASES: Avoid operating on patients with BMI > 32
  - too much subcutaneous fat for open
  - too thick of abdominal wall for lap
  - too much preperitoneal fat obscuring view

• EMERGENT CASES: Avoid if possible, but will likely need open surgery due to dilation of bowel → tissue repair +/- bioreabsorbable mesh ("just get them out of dodge" repair)

• Prefer TAPP and TEP

• I use Ligasure™ to minimize instrument exchange – it can grab, cut, and coag (and tissue tension not needed)
TAPP left inguinal hernia in BMI 33
LAPAROSCOPIC PARAESOPHAGEAL HERNIA REPAIR and/or FUNDOPLICATION

• You shouldn’t be performing these procedures in patients with BMI > 30 due to higher recurrence rate and poor symptom control

• If the patient qualifies, the patient should undergo WLS

• ELECTIVE CASES: Avoid operating on patients with BMI > 32

• EMERGENT CASES FOR PEH: Fix the hiatal hernia only (no wrap)