✓ CHECKLISTS IN BARIATRIC SURGERY

CHECKLIST #1

Diagnosis and management of acute intractable vomiting after gastric bypass

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Emesis after gastric bypass is a common event. This checklist is aimed at patients with unusual intractable vomiting

ACUTE

☑ **Basic Initial Management:**
_ Observation
_ Patient sitting position or left lateral decubitus
_ IV access
Proton pump inhibitors IV
_ NPO
_ Antiemetic
_ Foley catheter
_ Hydrate (NaCl)
_ Prokinetics
_ Plain abdominal x-ray
_ Consider NGT under fluoro guidance if risk of aspiration (no need to go beyond anastomosis)
_ Steroids

☑ **Differential diagnosis:**
_ Narcotics for pain (Morphine)
_ GJ Stenosis (edema)
_ Roux construction errors (Roux-en-O)
_ Tight mesocolic defect (for retrocolic route of roux limb)
_ Hypertensive crisis
_ Cardiac event
_ Neurologic event
_ B1 deficiency
_ distal obstruction (JJ Stenosis)
_ Internal (adhesions) or trocar site hernia
_ Intussusceptions
_ acute remnant dilatation
_ Acute pancreatitits
_ Biliary origin
_ Kidney stones (rare acutely, unless previous history)
_ Unrecognized bowel injury
_ Unrelated intrabdominal process (i.e. appendicitis)
_ Acute adrenal insufficiency if hypotension and preoperative history of chronic steroid therapy
_ Mouth breather

☑ **Differential diagnosis and treatment options:**

If hypertensive crisis
_ Labetalol IV as needed
_ ICU monitoring as needed
_ Restart preop hypertensive medication ASA PO is tolerated

If cardiac event
_ EKG, cardiac enzymes
_ Start therapy as per cardiology recommendation
_ ICU monitoring

If neurologic event
– Airway protection
_ Resuscitation
_ STAT imaging study and neurology consult
– Treatment dictated by etiology

B1 defficiency
_ IV thiamine
_ Continue hydration and monitor for improvement

If narcotic related
_ DC Morphine
_ Start Dialudid
_ Alternate IV narcotic (Dilaudid, demerol,etc)
_ IV Tylenol
_ Last resort IV Toradol

If clear emesis /sialorrhea / heartburn consider, GJ anastomosis stenosis
_ Next is UGI with gastrographin. Do not use thin barium as it can limit or delay the EGD by several days (Usually 3 until it clears up).
_ Consider EGD if totally obstructed
_ Consider decompression via NGT and observation with NPO PPI
_ Dilate after POD #4 under anesthesia in OR and consider redo anastomosis if not dilatable

If bilious emesis (GJ open) and Biliopancreatic limb open consider common channel obstruction. Differential diagnosis Intussuception, Adhesion, Hernia.
_ CT scan of the abdomen
_ If transition zone, re-laparoscopy if not consider ileus
_ If ileus, replace ileus. NGT decompression and observe for resolution. Replace potassium, magnesium and hydrate aggressively
_ If intraluminal clot, re-laparoscopy and evacuation vs. re-do J-J.
_ If intussusception, re-exploration with plication vs. re-do J-J.

If enteric emesis (GJ open) consider possible common channel or BP limb obstruction
_ CT scan of the abdomen
_ If remnant collapsed and no distal transition zone, consider ileus
_ If ileus treat as above mentioned
_ If remnant distended, consider emergent relaparoscopy and correction of JJ Stenosis vs. gastroparesis (see below). Leave a G-tube behind

If acute adrenal failure
_ Patient to be admitted to ICU
_ Stim test
_ Steroid and fluid replacement
_ Further treatment as per ICU protocol

If ketone bodies
_ Hydration
_ Antiemetics
_ Introduce carbohydrates in the diet (controversial)

If acute pancreatitis
_ Aggressive hydration
_ Monitor urine output
_ Obtain imaging study of pancreas and gallbladder (CT scan with IV contrast ± U/S)

If acute appendicitis
_ Clinical diagnosis ± imaging study
_ Surgical intervention

If unrecognized bowel injury
_ Re-exploration ± imaging study

If Kidney stone
_ Hydration
_ Urinalysis
_ Imaging to r/o hydronephrosis
_ Observation vs. GU consult

If biliary in origin
_ US RUQ
_ Laboratory evaluation
_ Elective vs. urgent cholecystectomy, vs. decompression CBD

If acute remnant distention
_ CT scan of the abdomen
_ If remnanant air filled and JJ open, consider gastroparesis and percutaneus decompression and drainage.
_ If remnant fluid filled and or J-J transition, emergent relaparoscopy and correction of JJ Stenosis. Leave G-tube behind.

CHRONIC

☑ **Behavioral**

Eating too fast, too much, wrong foods
_ Dietary counseling

Dumping syndrome
_ Dietary counseling

☑ **Mechanical**

Stricture
_ EGD dilatation, repeat as necessary. If refractory consider re-do dilatation with steroid injection vs. redo GJ.

Marginal ulcer
_ EGD, smoking cessation, NSAID's use cessation, PPI + Sucralfate
_ If refractory, consider excision with pouch reduction. Consider vagotomy if acid hypersecretion. Check for gastrinoma

Internal hernia
_ Re-exploration, reduction vs. resection, closure of defects

Intussusception
_ Reduction vs. resection, plication vs. re-do J-J

Abdominal wall hernias
_ Physical exam, ± imaging studies. Surgical repair

☑ **Associated process**

Biliary
– See above

Pancreatitis
– See above

Renal colic
– See above

Acute appendicitis
– See above

Pregnancy
_ Close vitamin levels monitoring and patient follow up
_ Direct communication with Obstetrician

Musculoskeletal injury
_ Treat symptomatically
_ Identify injury and implement appropriate treatment ■

Disclaimer: The information in this handout is for educational purposes only and should not be used as a primary source of treatment.

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