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Management of Tubes and Ostomies

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Speakers Bureau: Ironwood – Clinical Area – IBS-C, IBS-D
Examples of Enteral Access

**Fig 2. Examples of enteral access**

Feeding routes through the nose (alternatively through the mouth)

1. Nasogastric (orogastric)
2. Nasoduodenal
3. Nasojejunal

**Gastrostomy options**
- Percutaneous endoscopic gastrostomy (PEG)
- Balloon gastrostomy
- Button gastrostomy

**Jejunostomy options**
- Percutaneous endoscopic jejunostomy (PEJ)
- Percutaneous radiologic jejunostomy (PRJ)
- Surgically placed jejunostomy
- Percutaneous endoscopic gastrojejunostomy (PEG.J)

Indications for Placement

- Critical illness, mechanical ventilation
- Severe infection of the throat, Possible strictures/tumors of the esophagus
- Decompression
- Anticipate alternate means of nutrition – Chemo/radiation therapy, Progressive neurological diseases, Inability to maintain adequate nutrition/hydration
- Risk of aspiration
Contraindications to Nasogastric Placement

- Extensive naso-facial trauma
- Basilar skull fracture
- Esophageal trauma – burns, perforation
- Esophageal obstruction – tumor, foreign object
- Severe Coagulopathy
- Patient with abnormal anatomy, gastric bypass or Nissen fundoplication's should be placed under fluoroscopy
Proper Placement With/Without Guidewires

- Size Matters
- Nasogastric tubes come in various sizes (8, 10, 12, 14, 16 and 18 Fr). Stiff tubes are easier to insert
- Some fine-bore tubes may come with a guide wire to aid placement. Most with a radio-opaque marker at the tip to check its position on X-ray
NGT/Small Bore Tube Placement Pearls

• Know the anatomy and aim the tube down the nasal cavity into the nasopharynx

• Once the tube enters the nasopharynx – apply a small amount of pressure on the tube allowing the tube to move to the back of the throat

• Ask the patient to look down and swallow (once)

• Advance the tube – never force the tube

• Confirm placement
Nasogastric, Oral Gastric/Duodenal Tubes

- Determine proper placement
  
  Ultrasound guidance

  X-ray confirmation prior to starting nutrition – not all patients cough if the tube is in the wrong position

- Secure the nasogastric/duodenal tubes
  
  Tape and devices

  Bridals?
"Doctor, I'm fairly certain we've been feeding the wrong end for a week."
Risks Associated With Nasogastric/Duodenal Placement

- Nasal ala & Columella ulceration
- Sinusitis
- Misplacement in the lung – pneumothorax
- Aspiration
- Mucosal trauma if suction is used
- Inadequate nutritional support
Trouble Shooting

- Abrasions of the nares and Columella
- Malposition of the tube
- Clogged tubes – methods to unclog
- Tube kinking and knotting
- High residuals – related to tube position, gastric obstruction, ileus
Do’s and Don’t’s of NG/Small Bore Tubes

- Always check position prior to administering feeds, medications
- Drugs that shouldn’t be crushed: Extended release, tablets with coating
- Avoid crushing medications if a liquid or slurry can be prescribed
- Always flush the tube before and after administering medications/enteral feeds
G-Tubes, PEG Tubes and PEJ Tubes

• Indication for placement
  Long term need for nutrition support
  In preparation for chemotherapy/radiation therapy

• Tube Care and maintenance
  Tube position length and bumper placement
  Skin Care
Trouble Shooting PEG/G-Tubes

- Malposition – tube migrating into the stomach
- Leaking from stoma
- Skin excoriation and infection
- Buried Bumper
- Tube inadvertently removed
- Tube Clogging
Indications:

- Inability to tolerate gastric feeds
- Need to decompress the stomach while administering enteral feeds
- Gastric dysmotility/obstruction
- Pancreatitis
Gastroduodenal and Jejunostomy Tube

- Placed endoscopically, Surgically or with interventional radiology
- Allows for enteral feeds via the J-port and decompression via G-Tube
- Prone to clogging
- Gastroduodenal tube easily become dislodged
Examples of Ostomies

Indications for Ostomies

- Small or large bowel obstruction
- Obstructing Lesions
- Strictures or fistulas
- Intestinal injury – trauma, necrotizing enterocolitis
- Genetic conditions – Hirschsprungs
- Severe constipation or colonic inertia
Stoma Sites

- Patient should be able to see the ostomy
- Skin should be flat without creases or scars. Belt line should be avoided

Ileostomy – usually Right lower quadrant
Sigmoid colostomy – usually left lower quadrant
Ileostomy

• Indications – To rest the bowel in order to heal distal mucosa or protect anastomosis
  Evacuate stool following a total colectomy - severe Ulcerative Colitis, Crohn’s Disease, Neoplasm
  Relieve bowel obstruction
Complication of Ileostomy

- Complications:
  - Skin excoriation
  - Dehydration and depletion of electrolytes (K, Na, Mg) – Instruct pt on signs and symptoms
  - Malnutrition of nutrients – B12
  - Retraction or Prolapse
  - Parastomal Hernia
  - Stricture or fistula formation
  - Risk of nephrolithiasis
High Output Ileostomy

- Monitor for dehydration – dry mouth, decreased urinary output, abdominal pain, fatigue
- Consider trial of Loperamide or Lomotil
- May need to consider codiene, Octreotide, Gattex
- If the output is greater than 1500ml per day – may need IV hydration. Encourage patient not to increase PO fluid when experiencing dehydration
Colostomy

• Indication:
  – Severe refractory Ulcerative Colitis, Crohn’s Disease
  – Severe diverticulitis – recurrent episodes, diverticular abscess
  – Genetic syndromes and colonic inertia
  – Neoplasm
Complications of Colostomy

- Skin excoriation – ulcers, dermatitis, local skin infections – topical antibiotics, antifungal cream barrier creams and skin prep under the wafer
- Obstruction or ischemia
- Necrosis, Retraction and prolapse – need surgical intervention
- Stenosis
- Bleeding
"That would be a whole lot funnier if it weren't hooked up to your colostomy bag."
Risk Factors Associated With Complications

- Tobacco use
- Obesity
- Chronic steroid use
- Malnutrition
- Crohn’s Disease, UC, cancer
- Advanced Age
Care of Ostomies

- Size of the wafer and particular bag should be determined by a Stoma specialist.
- Closed ostomy bag – needs to be replaced often.
- Open ostomy bag – can be emptied and resealed.
- Many bags have a gas release valve.
- Empty bag when 1/3 to 1/2 full.
- Make sure the bag is odor proof.
Patient Concerns

• Gas:
  – Gas release valve on the bag
  – Deodorant can be added to the bag
  – Simethicone 125 mg – 1 – 2 before meals
  – Avoid gassy food – beans, broccoli

• Obstruction: Chew nuts well. Avoid skin from fruit and corn
Patient Concerns

- No restrictions on exercise
- Ostomy is not affected by sexual intercourse
- Bathing can be done – with or without the pouch
- Covering the Ostomy – Cummerbunds are available and cover the ostomy and the bag
Summary

- Know the purpose of the tube, type of tube, locations of the tube and assess for complications
- Know the location of the Ostomy and the potential complication
- Patient education is essential
- Know when to refer to a specialist


Thank You for Your Time