1.9 Intestinal Obstruction

Key Points

1. Intestinal obstruction is associated with ovarian and colorectal cancers (often a late manifestation) and is common with abdominal and pelvic primary tumors.
   Obstruction may be partial or complete, intermittent or persistent, have single versus multiple sites, and present in the small or large bowel.

2. Surgery is the best palliative treatment if possible.
   Co-morbid illness or progression of disease may make non-surgical management preferable.

3. Goals of Care in managing intestinal obstructions are relief of pain, nausea, and vomiting; avoidance of NG tube; and support of patient and family in an emotionally charged situation.
   Situation is charged because of patient's inability to eat and imminent death often within a few days to no more than a few weeks.

4. Consider subcutaneous, sublingual, topical, intravenous, or rectal routes for administration of medication. Oral route is not reliable.
   Usually choose morphine for pain control. Use sublingual or subcutaneous route, titrate dose to comfort, use small and frequent dosing schedule, or use pump with both continuous and PCA.

5. Octreotide puts the intestines at rest.
   Stops peristalsis against site of obstruction, reduces gastric secretions, increases electrolyte and fluid re-absorption, and often substantially reduces nausea and vomiting.

6. Antiemetics may be helpful. Patient may still vomit several times a day, but most prefer this to NG tube placement.
   Antiemetics include dopamine antagonist, haloperidol 1 SQ q6 (less sedating), chlorpromazine 25mg q6 PR (more sedating, less acceptable), and Lorazepam 1–2mg SQ q6 (if patient is anxious and sedation is welcomed).

7. Most patients will moderate oral intake on their own. It is not necessary to make patients completely NPO. Offer ice chips, sherbet, or juice.

Intestinal Obstruction

The Palliative Response

Diagnostic Considerations

- Etiology
  Ovarian cancer— late manifestation
  Colorectal cancers—late manifestation
  Abdominal tumors
  Pelvic primary tumors
- Distinctions
  Partial versus complete
  Intermittent versus persistent
  Single versus multiple sites
  Small versus large bowel

Management

- Surgical
  Best palliative treatment, if possible
  Not possible in some patients
- Nonsurgical
  Co-morbid illness may make it preferable
  Progression of disease may make it preferable

Good Prognostic Factors for Surgery

- Large-bowel obstruction treated with diverting colostomy
- Single site of obstruction
- Absence of ascites
- Good preoperative performance status

Poor Prognostic Factors for Surgery

- Proximal gastric obstruction or SBO
- Ascites
- Multiple sites of obstruction
- Diffuse peritoneal carcinomatosis
- Previous surgery and radiation treatment
- Poor performance and nutritional status
- Significant distant metastatic disease

Placing Stents by Endoscopy

- Esophageal obstruction
- Rectal obstruction
- Less effective in other sites
- Sometimes well tolerated but can lead to perforation, obstruction, and pain
- Usually only a temporary solution

NG or Venting Gastrostomy

- Most helpful in more proximal obstruction
- Decompresses the stomach but NG tube not tolerated long-term
- Venting gastrostomy may be more acceptable for longer term
- Rarely used due to generally poor condition of patients

Goals of Care

- Relief of pain
- Relief of nausea and vomiting
- Avoidance of the NG tube
- Support of patient and family as unit

  Emotionally charged situation

  Inability to eat

  Imminent death, often within a few days to few weeks

Route of Medication

- Oral route not reliable
- Alternatives to oral route

  Subcutaneous

  Sublingual

  Topical

  Intravenous

  Rectal

Pain Management

Usually morphine

- Sublingual or subcutaneous route
- Titrate dose to comfort
- Usually best to use small, frequent dosing schedule
- Pumps with both continuous and PCA are often best choice

Dexamethasone

40mg IV QD for 4 days

- Consider in most patients
- May result in reduction of edema around the site of obstruction and in temporary relief of obstruction
- May enable to resume oral medications including dexamethosone
- If not effective, can discontinue

Octreotide

0.1–2mg SQ q8 hours

- Puts bowel to rest and stops peristalsis against site of obstruction
- Reduces gastric secretions
- Increases electrolyte and fluid re-absorption
- Often substantially reduces nausea and vomiting

Antisecretory Drugs

- Reduce saliva and secretions
  Produce up to 2 liters a day
  If obstructed, patient must vomit back up
- Scopolamine topically
- Glycopyrrolate 0.1–2mg SQ q8 hours
- H2 blockade or proton-pump inhibitors
  May reduce gastric acid secretions

Antiemetics

- Metocholopramide (Reglan)
  A prokinetic—not appropriate if obstruction complete
  May be helpful in partial obstruction
  Time trial—stop if colic worsens
- Dopamine antagonist
  Haloperidol 1 SQ q6 is less sedating
  Chlopromazine 25mg q6 PR is more sedating (less acceptable)
- Lorazepam 1–2mg SQ q6
  If patient is anxious and sedation is welcomed

Medical Management

- Outcome
  These regimens relieve symptoms satisfactorily in most patients
  Patient may still vomit several times a day but usually prefers this to NG tube placement
- Oral Intake
  Offer ice chips, sherbet, or juice
  Most patients will moderate oral intake
  Not necessary or kind to make completely NPO

Total Parenteral Nutrition (TPN)

- Usually not recommended
- May have deleterious effects
- Problems with infections
- Very select patient population may benefit

Hydration

- Assess burden versus benefit
  Appropriate only for selected patients
  May be difficult to maintain IV site
  Problems with fluid overload
- Hypodermoclysis
  Hydration via the subcutaneous route
  May be helpful in selected patients

Management

- Selection of treatment
  No comparative studies to determine best treatment in management of obstruction
- Assess benefit and burden daily
- Adjust medication
  Maximize control of symptoms
  Support patient and family

Selected Readings

Overview

Muir, J. C. "Malignant Bowel Obstruction." In *Principles and Practice of Supportive Oncology* edited by A. M. Berger, R. K. Portenoy, and D. E. Weissman. New York: Lipincott Williams & Wilkins Healthcare 2 (1999): 1–7.

Medical Management

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