





MALIGNANT BOWEL OBSTRUCTION

INTRODUCTION

Malignant bowel obstruction (MBO) occurs when there is blockage of the forward flow of gastric and intestinal contents through the gastrointestinal tract. It can occur in the small or large intestine. MBO can be functional (paralytic/dynamic) or mechanical (organic/adynamic), or both. It can be partial or complete, high or low or both, and transient (acute) or persistent (chronic). It indicates advanced stage of disease, with the highest incidence in ovarian and colorectal cancer.

Causes include:

- Cancer direct infiltration, intraluminal obstruction or external obstruction
- Treatment adhesions, post-radiation fibrosis
- Medications opioids, anti-cholinergics
- Debility constipation
- Other condition e.g. strangulated hernia

ASSESSMENT

- Determine the underlying cause and possible level of obstruction, effectiveness of treatment and impact on quality of life for the patient and his/her family (refer to the Guideline Symptom assessment)
- There can be many symptoms which need to be individually assessed
 - Nausea and/or vomiting (100%)
 - Continuous abdominal pain secondary to tumour and/or nerve infiltration -(90%),
 - ➤ Intestinal colic (75%)
 - Constipation/diarrhoea/faecal Incontinence/spurious diarrhoea
- Physical examination
 - Nutrition and hydration
 - Abdominal distension and ascites
 - Palpable intra-abdominal mass
 - > Altered bowel sounds absent to hyperactive and audible (borborygmi)
 - Stoma or per rectal examination
- Laboratory investigations (if necessary and appropriate)
 - Plain X-ray abdomen(erect)
 - Computed tomography scan of abdomen/pelvis (contrast enhanced) especially if surgical intervention is considered
 - > Do not investigate if patient is too ill, unwilling and/or unfit for surgery

MANAGEMENT







- Should be done by a multidisciplinary team (surgeons, oncologists and palliative care physicians)
- It is important to try and relieve distressing gastrointestinal symptoms

Surgical

- Surgery in most situations in advanced cancer patients is not possible. This
 depends on different factors including whether it is obstruction at a single site or
 multiple sites. If surgery is not appropriate or possible, survival and prognosis is
 generally poor.
- Consent to palliative surgery should include discussion of the surgical risks, complications, and alternatives such as pharmacological management for symptom control, stenting and venting procedures
- Absolute Contraindications
 - Previous laparotomy findings preclude the prospect of a successful intervention
 - Intra-abdominal carcinomatosis as evidenced by diffuse palpable intraabdominal tumours
 - ➤ Massive ascites which re-accumulates rapidly after paracentesis
 - Multiple levels of obstruction based on radiology findings
 - ➤ Weight loss > 9kg
- Relative Contraindications
 - Poor performance status
 - Widespread tumour
 - > Age > 65 years, with cachexia
 - > Low serum albumin
 - Raised blood urea, creatinine, alkaline phosphatase
 - Previous radiotherapy to the abdomen or pelvis
 - Poor nutritional status
 - > Short interval from diagnosis to obstruction
 - Advanced cancer liver metastases, other distant metastases, pleural effusion, or pulmonary metastases producing symptoms
- Indications
 - ➤ A single discrete organic obstruction post-operative adhesions or an isolated site of neoplasm
 - > The patient's general condition is good (independent and active)
 - > No evidence of disseminated disease
 - ➤ Weight loss < 9kg

Interventional treatments



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- Stenting To be considered in patients with:
 - Surgical risk and unfit for surgery
 - Bowel obstruction (gastric outlet / proximal small bowel / colon / rectal obstruction) in which decompression by a stent allows treatment of coexisting medical complications to enable surgery to be carried out later, after staging of the disease and an optimal colonic preparation
- Venting gastrostomy In a fit patient with gastroduodenal or jejunal obstruction and persistent vomiting to relieve symptoms. (rarely performed)
- Nasogastric tube (as drainage) especially to manage patients with faecal vomiting, persistent vomiting at home

General

- Food
 - > Small, frequent meals as tolerated
 - Low fibre diet
 - Best in the morning
 - Chew and spit the food and not swallow
- Dry Mouth and Thirst
 - Conscientious oral care
 - Few millilitres of fluid every 30 minutes, preferably as a small ice cube/ ice lolly
- Parenteral fluids administration
 - Intravenous fluids may be appropriate in patients who are dehydrated and not dying
 - Subcutaneous fluids would be the mainstay of the management of symptomatic dehydration
 - Administration of up to 1-1.5L of subcutaneous fluid could decrease nausea, fatigue and delirium but giving more fluids may worsen vomiting by increasing bowel secretions

Pharmacological measures - To be considered in patients for whom surgical management is contraindicated with the goal to relieve nausea and vomiting.

Nausea and vomiting

- The route of drug administration should be subcutaneous rather than oral
- In the absence of colic, prokinetics is the initial drug of choice
 - ➤ Metoclopramide 10mg PO stat and qid or 10mg S/C stat, 30-120mg/24 hours and 10mg prn
- In the presence of colic, prokinetics are contraindicated and an anti-secretory and antispasmodic medication should be started



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- Hyoscine butyl bromide 20mg S/C stat, 60mg/24 hours CSCI, increase to 120 mg/24 hours, maximum of 300mg/24 hours and 20mg S/C prn or
- ➤ Glycopyrronium 200mcg SC stat and prn, 600-1200mcg/24 hours CSCI with
- ➤ Haloperidol 2.5mg SC stat, 2.5-10mg/24 hours CSCI and 2.5-5mg prn
- If there is no considerable relief with the above measures, somatostatin analogue Octreotide can be given by CSCI either alone or in addition to Hyoscine.
 - Octreotide starting dose of 300mcg/24 hours CSCI, 75 to 90% respond to 600 - 800mcg/24 hours CSCI
- 5HT3 antagonists can be considered (when prokinetics can't be used as in colic for vomiting)
 - Granisetron 3mg SC OD
 - Ondansetron 8 mg S/C tid
- A trial of corticosteroids could be undertaken.
 - Dexamethasone 8-16mg S/C stat OD, for 5-7 days and stop if not beneficial

Constipation

- A full rectum should be emptied using local suppository or enema preparations before presuming a diagnosis of bowel obstruction
- A phosphate enema and a stool softener can be prescribed, i.e. Syr. Cremaffin 30ml hsod. Docusate Sodium 100-200mg bd is an alternative
- Bulk-forming, osmotic and stimulant laxatives should be avoided
- All laxatives should be stopped in complete obstruction

Pain

- Morphine should be administered subcutaneous
- Fentanyl/ buprenorphine patch should be considered for long term control of pain
- The dose of opioids should be based on the prior requirement of analgesics

References

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