Waikato District Health Board

Guideline

Management of Malignant Bowel Obstruction

Guideline Responsibilities and Authorisation

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Guideline Review History

Version	Updated by	Date Updated	Description of Changes
2	Lana Ferguson	13 May 2021	Modifications to pharmacological management

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Management of Malignant Bowel Obstruction

1. Overview

Bowel obstruction is a common complication of advanced abdominal or pelvic malignancy.

There may be a number factors causing obstruction.

Obstruction can occur at multiple levels in the bowel, particularly in the setting of peritoneal or omental disease. The small bowel is more commonly involved.

Obstruction may be partial or complete. Partial may transition to complete obstruction.

Medical management of obstruction is indicated once it has been decided that surgical options are either inappropriate or not beneficial.

The aim of medical management is to reduce symptoms of abdominal colic and pain, nausea and vomiting.

If obstruction is partial, management will also be aimed at relieving obstruction and resuming normal bowel function.

1.1 Purpose

To provide guidance on the medical management of malignant bowel obstruction.

1.2 Scope

All Waikato District Health Board (DHB) medical staff involved in the clinical care of palliative patients will be aware of and familiar with guidelines.

1.3 Patient group

Any patient with a malignant bowel obstruction who is not appropriate for surgical intervention.

2. Clinical Management

2.1 Guideline

2.1.1 Causes of Malignant Bowel Obstruction (MBO)

Tumour mass	Single or multiple Invasion into bowel lumen Extrinsic compression of bowel
Constipation	Fecal loading, impacted faeces, obstipation
Adhesions	Post-operative, malignant, post-radiation
Volvulus	Around tumour, adhesions or fistula
Ileus	Infiltrative disease effecting enteric nervous system Autonomic nerve impairment (retroperitoneal disease) Drug effect (opioids, anticholinergics) Infection/peritonitis Ascites

2.1.2 Non-pharmacological management of MBO

- Initial management may follow usual surgical management; bowel rest, nil by mouth, parenteral fluids and nasogastric tube (NGT) drainage of gastric contents.
  - This should only be a temporary measure while decisions are being made regarding surgical options versus medical management.
- Maintenance fluids should not be routinely continued as part of MBO management.
  - Excess fluid can worsen gut edema, increase gut secretions and overall slow the resolution of obstruction.
  - Temporary parenteral hydration may be appropriate where dehydration precipitates delirium or renal failure potentiating opioid metabolite accumulation.
- Obstruction can usually be managed without NGT drainage, but there may be some situations where the symptoms of nausea and vomiting are best managed via NGT drainage, providing the tube is tolerated by the patient.
- Regular mouth care and ice chips should be used to manage a dry mouth and thirst.
- If nausea and vomiting is controlled it may be appropriate to cautiously restart oral intake.
- Meals should be small, low residue.
  - Dietary supplements may be appropriate or better tolerated.

2.1.3 Pharmacological management of MBO

- Medication should always be parenteral (subcut or IV). Gut absorption is variable and unreliable in MBO.
- Analgesia should be given to control abdominal pain associated with obstruction.
- In a complete bowel obstruction, hyoscine butylbromide (Buscopan®), may be helpful to control pain due to colic BUT it should not be used in a partial bowel obstruction. Hyoscine butylbromide slows gut motility and will impede resolution of partial bowel obstruction.
- If the patient is on long-acting (LA) opioids prior to obstruction, ensure these are prescribed via continuous subcutaneous infusion (CSCI)
  - Discuss with palliative specialist (or see *pain management guideline*) for advice on conversion from oral to subcut route.
  - If faecal loading or impaction is present; per rectal treatments should be given to clear bowel.

2.3.4 Review of medications used in MBO

Drug	Dosing	Action
Corticosteroids Dexamethasone	4 -16 mg subcut mane *Daily dosing mane, there is no indication to split steroid dosing throughout day.*	For use in partial or incomplete obstruction Reduces gut oedema, or peritumoural oedema/inflammation May have antiemetic benefit If no improvement in symptoms after 5 days, steroid should be stopped
Prokinetics Metoclopramide	10-20 mg subcut TDS OR 30-60 mg CSCI over 24 hours	Only use in partial or incomplete obstruction Promote peristalsis Antiemesis *Contra-indicated* in a complete bowel obstruction Stop if causes colic – can give a trial dose of 10mg subcut. If this does not cause colic then it is reasonable to give as a regular medication or via CSCI
Anti-secretories Hyoscine butylbromide	20 mg subcut TDS	Hyoscine butylbromide may have an anti-motility/antisecretory role in a

(Buscopan®)	OR 60-120 mg CSCI over 24 hours	complete obstruction but should NOT be used in partial or incomplete obstruction.
Octreotide	300-900 microg CSCI (can be given in divided dose e.g. 100microg subcut TDS)	Octreotide is more effective than hyoscine butylbromide in relieving gastrointestinal symptoms and significantly reduces gastric secretions Prokinesis at level of duodenum
Famotidine	20mg SC bolus BD OR 20-40mg CSCI over 24 hours	Famotidine reduces gastric secretions; can be useful in setting of gastric outlet obstruction or high level obstructions
Ranitidine *(not routinely available now)*	150-300 mg CSCI over 24 hours	Ranitidine reduces gastric secretions; can be useful in setting of gastric outlet obstruction or high level obstructions
Antiemetics Metoclopramide	10-20 mg SC TDS OR 30-60 mg CSCI over 24 hours	Only in partial or incomplete obstruction Promotes peristalsis and antiemesis *Contraindicated* in complete obstruction Stop if causes colic
Haloperidol	1-2 mg CSCI (or 0.5 mg - 1 mg subcut BD) 0.5 mg subcut Q4H PRN Max 5 mg total / 24hrs	1st line in complete bowel obstruction No prokinetic effect

3. Audit Indicators

3.1 Indicators

- Antiemetics are prescribed appropriately according to complete or incomplete MBO
- Corticosteroids are routinely used for medical management of MBO
- Anti-secretory medication used in the setting of high gastric output MBO

4. Evidence Base

4.1 Associated Waikato DHB Documents

- Waikato DHB Medicines Management policy (Ref. 0138)
- Waikato DHB Medicines Management Infusion and Related Therapies Skills Verification guideline (Ref. 1340)
- Waikato DHB Care of the Dying guideline (Ref. 4966)
- Waikato DHB Care of the Deceased / Tūpāpaku policy (Ref. 0133)
- Waikato DHB Resuscitation policy (Ref. 1970)
- Waikato DHB Tikanga Recommended Best Practice flip chart
- Waikato DHB Inpatient Pain Service Adult Pain Management Handbook

4.2 Bibliography

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