Constipation

KEY POINTS

- Prevention is the most important part of the treatment
- Constipation is defined as the infrequent and difficult passage of hard stools
- Constipation may be related to the underlying serious illness, the treatment, or may be unrelated
- The possibility of bowel obstruction should be considered, and treatment modified accordingly
- The prevalence of constipation in palliative care patients is 30-80%
- Constipation can be a distressing symptom for patients and cause other problems such as nausea and vomiting, abdominal pain, or, if left untreated, bowel obstruction
- Preventing and relieving constipation can improve quality of life

- Normal frequency of bowel movements varies between individual children
- Painful dry, hard, or small stools are features of constipation

ASSESSMENT

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- Taking a thorough patient history and performing a good clinical assessment are important in identifying the underlying cause(s) of the constipation
- Common causes of constipation in palliative care include:
  - Opioids or other medications
  - Dehydration or decreased oral intake
  - Mechanical obstruction
  - Immobility

- Emotional stress
- Electrolyte imbalances

- Investigations to consider may include an abdominal x-ray to assess the degree of constipation bowel gas pattern and rule out ileus or bowel obstruction

- Mass in LLQ may be present
- Rectal exam may show impacted faeces or fissure

MANAGEMENT

- Mild constipation (in relatively well patients these measures are generally inappropriate in last days/weeks of life)
- If possible (in relatively well patients these measures are generally inappropriate in the last days/weeks of life)
  - Increase fluids
  - Increase activity when possible

Pharmacological Recommendations

- First-line recommended medications: sennosides, lactulose, polyethylene glycol (PEG), glycerin or bisacodyl suppository
- Prophylaxic laxatives are required when opioid therapy is initiated; continue for the duration of opioid therapy
- Titrate laxatives every 1 to 2 days, to effect
- Laxative-induced diarrhoea can be resolved by holding back on medications for a few days, then restarting at a lower dose

Polyethylene glycol (PEG) 3350

- **Maintenance: 0.4-1 g/kg/dose PO once daily (Maximum: 34 g/day)**
- **Disimpaction: 1-1.5 g/kg/dose PO once daily x 3-6 days (Maximum: 100 g/day), then reduce to maintenance dose (above)**

- Onset of effect: usually 1-4 days. Consider other options if more immediate relief is desired

Bisacodyl

- Oral: 0.3 mg/kg/dose PO once daily (Maximum: 15 mg/dose), or
- 3-10 years: 5 mg PO once daily
- >10 years: 5-15 mg PO once daily
- Tablets are enterically coated: Do not chew or crush tablets. Do not give within 1 hour of antacids or milk products
- Rectal: 5-10 mg once daily PR

Senna (based on 8.6 mg of senna per 1 tablet)

- <2 years: ½ tablet PO qHS-BID
- 2-5 years: ½ to 1 tablet PO qHS-BID
- 6-12 years: 1 to 1½ tablet PO qHS-BID
- ≥12 years: 2-3 tablets PO qHS-BID

Lactulose (concentration 667 mg/mL)

- 1 month-1 year: 2.5 mL PO once daily to BID
- 1-5 years: 5 mL PO once daily to BID
- 5-10 years: 10 mL PO once daily to BID
- 10-18 years: 15 mL PO once daily to BID
- Usual dose: 0.5-1.5 mL/kg/dose PO once daily to BID

PITFALLS/CONCERNS

In patients in the final terminal phase, i.e. hours to days, it may be inappropriate to treat an obstruction or constipation

Medication	Starting Dose	Maximum Dose	Onset of Action	Notes
Sennosides	**5-15 mg PO daily**	36 mg PO TID	6-12 hours	-Intestinal colic possible -Avoid in bowel obstruction (perforation risk)
Lactulose	**15 mL PO daily with food**	30 mL PO TID	1-2 days	-Requires sufficient fluid intake -May cause abdominal bloating, nausea, intestinal colic -Risk of electrolyte disorders and volume overload
Polyethylene glycol	**17 g PO daily**	17 g PO TID	1-3 days	-Requires 125-250 mL fluid intake per 17 g dose -May cause nausea, bloating, vomiting, stomach cramps -Contraindicated in intestinal obstruction, perforation, inflammatory bowel conditions
Glycerin suppositories	**1 PR daily**	-	15-30 minutes	-Use with caution in rectal irritation, neutropenia, or thrombocyctopenia (infection and bleeding risk)
Bisacodyl suppositories	**1 PR daily**	-	20 minutes up to 3 hours	-Risk of abdominal cramps, diarrhoea, local rectal irritation

- Do not use enemas or suppositories in children with neutropenia and thrombocytopenia
- Children with constipation may have developed rectal tears complicating the problem

PALLIATIVE TIPS

- Bowel regimens should be individualized and titrated to the individual patient's response
- A bowel regimen should be initiated at the time opioids are started and should be continued for as long as the patient takes opioids
- Urinary retention, nausea and vomiting, terminal restlessness, and other symptoms can sometimes be relieved by treating constipation

- As with adults, encourage increased fluid intake and exercise when appropriate

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