SESLHD GUIDELINE COVER SHEET

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KEY TERMS	Constipation in palliative care; life limiting illness; microlax enema, Relistor
SUMMARY	To provide guidance and advice on the procedures for the successful assessment, prevention and management of opioid induced constipation in adult inpatients with an advanced, progressive illness receiving palliative care.

PREVENTION AND MANAGEMENT OF OPIOID INDUCED CONSTIPATION IN ADVANCED PALLIATIVE CARE PATIENTS

Section 1 - Background

Successful management of constipation and altered bowel habits in palliative care adults in hospital depends on the assessment and identification of the underlying cause and/or other contributory factors.

Prevention of constipation is imperative and a direct nursing responsibility.

Early and accurate assessment, followed by preventative measures can eliminate the need for more invasive treatments.

All information on bowel assessment and management should be clearly and consistently documented on each shift on eMR. This information should be handed over across all shifts and on inter-ward and inter-hospital transfers.

This guideline is to be used as an adjunct to SESLHDGL/098 - Bowel Management.

Section 2 – Principles

Advanced palliative care patients have a progressive life limiting illness and may require specialist palliative care interventions for effective symptom management.

In palliative care patients there is a limit to the potential for prevention and management of constipation by dietary, lifestyle or preventive strategies, and these should not be solely relied upon. The consequences of unmanaged constipation include abdominal pain, bloating, nausea, vomiting, overflow incontinence, tenesmus, faecal impaction, urinary retention and, occasionally, bowel obstruction and colonic perforation. Constipation can contribute to problems such as delirium, agitated and distressed behaviour, depression and anxiety. Unmanaged constipation may interfere with normal absorption of medications.

Patients receiving opioid medications are at particularly high risk of constipation as the opioids:

- cause constipation by binding to specific opioid receptors in the enteric and central nervous systems
- cause a slower gut transition time which increases water reabsorption from stool.

Section 3 – Process

- A comprehensive assessment is required to accurately diagnose the presence and potential causes of constipation in patients with life-limiting illnesses
- A thorough history and physical examination are recommended as essential components of the assessment process
- Medication review for other constipating agents
- Bowels are to be monitored every shift and documented in eMR
- A digital rectal examination (DRE) is required to exclude faecal impaction if it has been more than 3 days since the last bowel movement or if the patient complains of incomplete evacuation, and the treating medical team informed. (Refer to Appendix B of SESLHDGL/098 - Bowel Management)
- All medications must be prescribed by an authorised prescriber on the appropriate electronic medication management system (e.g., eMEDs, eRIC) or paper medication chart. This includes medications which are Nurse / Midwife Initiated as per SESLHD Nurse/Midwife Initiated Medicines Protocols.

Section 4 – Definitions

Constipation:

- Constipation refers to difficulty, straining and passing of hard dry stools and infrequent bowel movements over a period of time. It is a highly subjective symptom with normal bowel habits varying between individuals.
- Defining constipation must involve measureable objective symptoms including frequency of defecation and stool characteristics, as well as the patient's perception of constipation relating to ease of defecation and associated level of discomfort.
- Although constipation is exacerbated by **opioids** and anticholinergic drugs, the cause of constipation is usually multifactorial.
- The consequences of unmanaged constipation include abdominal pain, bloating, nausea, overflow incontinence, tenesmus, faecal impaction, urinary retention and occasionally bowel obstruction and colonic perforation; all of which can profoundly affect the quality of life.

Faecal loading:

- A large volume of stool hard or soft that accumulates in the rectum and sigmoid colon; often presents as faecal incontinence.

Faecal Impaction:

- A solid immobile bulk of faeces that develops in the rectum as a result of chronic constipation.
- Faecal impaction must be clinically diagnosed.
- Abdominal X-ray ***may*** be required to determine extent of impaction. (*A plain abdominal X-ray is of limited utility in diagnosis of constipation and is mainly used to exclude bowel obstruction*).

Collapsed Rectum:

- The rectal wall should be easily felt collapsed around the examining finger.
- This usually indicates a functioning bowel.

Ballooned Rectum:

- Rectum feels dilated on examination.
- A ballooned (dilated) rectum is indicative of gross constipation.
- An empty ballooned rectum may indicate faeces high up in the bowel, or it may be a sign of bowel obstruction.
- Consider abdominal X-Ray.

Laxatives (aka Aperients):

- Commonly used to treat constipation and classified by the mode of action into categories of bulking agents, stimulant laxatives, faecal softeners and osmotic laxatives.

Enema:

- An enema is the introduction of fluid through the anus into the rectum and colon.
  A retention enema is fluid that is introduced into the rectum to be retained. Ideally overnight but as long as comfortable for the patient.

Digital Rectal Examination (DRE):

A DRE is the examination of the rectum with a gloved and lubricated finger for the purpose of:

- Establishing the presence, amount and consistency of faecal matter in the bowel.
- Assessing the need for rectal medication or digital removal of faeces in extreme cased of faecal impaction.
- Assessing the anal sphincter function and tone and rectal sensation.

Opioid Induced Constipation:

- Opioids cause constipation by binding to specific opioid receptors in the enteric and central nervous systems.
- It also causes a slower gut transition time which increases water reabsorption from stool.
- Constipation is primarily the result of opioid actions on receptors in the bowel.

Section 5 – Contraindications and precautions

- Many palliative patients will have difficulty tolerating the required volume of Macrogol 3350 to treat faecal impaction (8 sachets in 1 L fluid over six hours).
- DRE, rectal laxatives and enemas are contraindicated in patients with:
  - recent rectal surgery
  - bone marrow suppression (low platelets <30)
  - anticoagulation therapy
  - carcinoma of the rectum
- Refer to MIMs Methylnaltrexone for detailed information on contraindications and precautions.

Section 6 – Management of constipation in palliative context

6.1 First Line – Initial management of Constipation in Palliative Care

- Review patient's regular medications as they may be on other constipating agents (e.g., 5HT3 antagonists, anticholinergics, etc) and consider alternatives where possible.

① Docusate sodium 50 mg + Sennoside B 8 mg tablet (e.g., Coloxyl with Senna®),
2 to 3 tablets PO up to TDS for a maximum of 24 hours.

OR

① Macrogol 3350 sachet
1 to 2 sachets BD PO. Maximum 6 sachets in 24 hours if tolerated.

– Bulk-forming laxatives have little role in preventing opioid- induced constipation

– **If the patient has produced a hard stool despite initial laxatives**, then further softening is required. Plain docusate at a higher dose can be considered, either alone or added to the above doses.

Docusate sodium 240 mg tablet,
1 tablet PO nocte. May be titrated 1 tablet PO BD (maximum dose)

6.2 Second Line Treatment of Constipation in the Palliative Context - Rectal Suppository and Enema

– Attend DRE and if faeces are present in the rectum,

① Glycerol 2.8 g suppository
1 suppository rectally, as a single dose initially.

AND

① Bisacodyl 10 mg suppository
1 suppository rectally, as a single dose initially.

If bowels do not open after 24 hours,

② Sorbitol + Sodium citrate + Sodium lauryl sulfoacetate enema (e.g., Microlax®)
1 enema rectally

If Microlax® enema not effective

③ Monobasic sodium phosphate monohydrate + Dibasic sodium phosphate heptahydrate enema (e.g., Fleet Ready-to-use®)
1 enema rectally (AVOID if possible, in palliative care patients)

– If a patient has a ballooned empty rectum, consider abdominal X-ray and then consider administering a high olive oil retention enema as softener and lubricant.

6.3 Third Line Treatment of Constipation in the Palliative Context

Consider use of a peripherally specific opioid antagonist (e.g., Methylnaltrexone)

Only for refractory opioid induced constipation.

Methylnaltrexone 12 mg/0.6 mL injection,
Once daily subcutaneous injection, dose according to body weight and renal function. Maximum three doses.

Patient weight (kg)	***Dose***
< 38 kg	*0.15 mg /kg*
38 kg to less than 62 kg	*8 mg*
62 – 114 kg	*12 mg*
> 114 kg	*0.15 mg/kg*

- For severe renal impairment (creatinine clearance <30mL/min) decrease dose by one half.
- Refer to MIMs Methylnaltrexone for detailed information on Contraindications and Precautions

6.4 Faecal Loading or impaction in the palliative context

① Docusate sodium 50 mg + Sennoside B 8 mg tablet (e.g., Coloxyl with Senna®),
2 to 3 tablets PO up to TDS for a maximum of 24 hours.

OR

① Macrogol 3350 sachet
8 sachets dissolved in 1 L PO daily, consumed within 6 hours. A course for faecal impaction does not normally exceed 3 days.

- If opioid induced constipation persists, see section 6.3.
- Fluid stool may be an indication of impaction with overflow.
- May require PR intervention.

① Glycerol 2.8 g suppository
1 suppository rectally, as a single dose initially.

AND

Bisacodyl 10mg suppository
1 suppository rectally, as a single dose initially

① Olive Oil
30 – 60 mL rectally, as a single retention enema via 12FG non-ballooned catheter, use overnight.

6.5 In refractory constipation that is not thought to be opioid induced, in extenuating circumstances consider manual disimpaction

- Manual disimpaction is not routinely recommended in Palliative Care, as the procedure can be very distressing and painful for the patient.
- If manual disimpaction is considered necessary, it MUST be discussed with a palliative care specialist prior to considering performing procedure
- Before performing this procedure ensure patient has analgesia for pain, ideally subcutaneous. Avoid oral pain relief due to impaired absorption
- The administration of midazolam (even for debilitated patients) reduces anxiety and helps make this procedure more tolerable for the patient:

  Midazolam injection,
  2.5 to 5 mg subcutaneous injection, at least 15 minutes prior to procedure.

- Assess the patient's pain prior to procedure and administer analgesia at this time if required.
- Explain the procedure to patient/NOK and obtain verbal consent
- Ensure that midazolam (+/- analgesia) is charted on eMR / eRIC and administer dose at least 15 minutes prior to procedure.
- Position the patient in the left lateral position, knees comfortable drawn up to chest, observing patient's privacy and dignity. Place an absorbent pad underneath patient.

  Olive Oil
  30 – 60 mL rectally, as a single retention enema via 12FG non-ballooned catheter.

- Gently, digitally disimpact rectum using extreme care not to tear or damage rectal wall.

  Sorbitol + Sodium citrate + Sodium lauryl sulfoacetate enema (e.g., Microlax®)
  1 enema rectally, within 24 hours of Olive Oil enema.

Section 7 – Laxatives (Recommended)

Refer to SESLHD Nurse/Midwife Initiated Medicines Protocols

SOFTENER	TYPE	ACTION	COMMENTS
Docusate sodium (Coloxyl®)	Drops Tablets	Faecal softener	Suitable for all patients as a first line treatment for chronic constipation
OSMOTICS	**TYPE**	**ACTION**	**COMMENTS**
Macrogol 3350 (Movicol®, Osmolax®)	Powder	Delivers water to the colon, softens stool and increases peristalsis. There is no net loss of sodium, potassium and water.	Patients need to be able to tolerate drinking 125 mL water or juice per sachet. Can have up to 8 sachets per day for faecal impaction. Not suitable for patients on modified diets.
Lactulose (Actilax®, Dulose®)	Syrup	Water is drawn into the bowel, increasing the fluid volume softening the stool and increasing peristalsis	***Please note*** *not recommended for palliative care patients.* Requires a high fluid intake. Can cause fluid and electrolyte imbalances, diarrhoea and abdominal cramps. Is suitable for diabetics. Maybe suitable for hepatic encephalopathy.
STIMULANTS	**TYPE**	**ACTION**	**COMMENTS**
Bisacodyl (Dulcolax®)	Tablets	Increases pressure waves in colon and stimulates emptying.	Can cause cramps and bloating.
Docusate & Senna (Coloxyl & Senna®)	Tablets	Faecal softener and peristaltic stimulant	Maintain adequate water intake.
Sodium picosulfate (Dulcolax SP Drops®)	Drops	Stimulates peristalsis and promotes accumulation of water into the bowel	Requires a high fluid intake. Can cause fluid and electrolyte imbalances.
RECTAL LAXATIVES	**TYPE**	**ACTION**	**COMMENTS**
Glycerol	Suppository	Glycerol softens stools by osmosis and is also a lubricant	Suitable for all age groups as first line management Should be inserted rectally into the stool.
Bisacodyl	Suppository	Stimulant increases peristalsis	Suitable to be given in combination with glycerine suppository. Should be placed against the rectal wall as it is absorbed through the rectal mucosa. May cause cramping.

Section 7 – Laxatives (Other)

THESE LAXATIVES MUST BE PRESCRIBED BY A MEDICAL OFFICER			
LAXATIVES	**TYPE**	**ACTION**	**COMMENTS**
Monobasic sodium phosphate + Dibasic sodium phosphate (Fleet®) enema	Enema		**Not recommended** in palliative care patients Refer to Precautions in MIMs
Sorbitol + Sodium citrate + Sodium lauryl sulfoacetate enema (Microlax®)	Enema	Acts to increase intestinal water secretion and stimulate peristalsis.	**A DRE must be performed prior to insertion.** Gently insert the lubricated enema tip into the rectum. If tip does not insert freely or patient complains of pain, stop immediately. Seek medical advice before continuing. Advise patient to remain in position and hold contents of enema in rectum for at least 10 minutes if possible. Enema consists of a 5 mL disposable plastic tube with a flexible enema tip. Contains sodium citrate, sodium lauryl sulfoacetate, glycerin, sorbitol, and sorbic acid.
Olive Oil	Enema	Rectal lubricant	**A DRE must be performed prior to insertion.** Olive oil (30 – 60 mL) is retained in the rectum overnight to soften hard or impacted faeces to allow easier evacuation. Do not expect immediate results. The enema may need to be repeated daily before evacuation is achieved. Efficacy depends on the patient's ability to retain the oil. This is usually administered in conjunction with oral aperients or followed by stimulant suppository 12 hours after oil administration.
Methylnaltrexone (Relistor®)	Injection	Blocks the constipating effects of opioids in the GIT	Methylnaltrexone injection (Relistor®) is only registered for use in palliative care patients with opioid induced constipation. It is administered as a subcutaneous injection. It is used as a 3rd line option for people who have opioid induced constipation that has not responded to adequate management outlined below, in whom bowel obstruction has been excluded. Methylnaltrexone is not a treatment for constipation caused by factors other than opioids. About one third to one half of patients will achieve a bowel motion within four hours of a methylnaltrexone dose, without loss of opioid analgesic effect.
Phosphorus salts	Oral Solution		Phosphorus salt oral solutions cannot be initiated for SESLHD inpatients in accordance with the SESLHD Medicines Formulary. If a patient is admitted to hospital and already taking this medicine, it may be continued after review by a medical officer.

Section 8 – Documentation in palliative context

Complete bowel chart on eMR each shift and post PR intervention.

Section 9 – Knowledge evaluation

Q1: What are the components and indications for physical examination if constipation is suspected?

A: Abdominal and rectal examination (DRE) are required if the patient:

- has failed to pass stool after 3 days, or if the patient reports constipation or incomplete evacuation.

Q2: What are the contraindications to digital rectal examination (DRE) or rectal laxatives/enemas?

A: DRE, rectal laxatives and enemas are contraindicated in patients with:

- recent rectal surgery
- bone marrow suppression (low platelets <30)
- anticoagulation therapy
- carcinoma of the rectum

Q3: Outline the first and second-line treatment recommended to treat constipation in the palliative context

A: First-line treatment involves optimisation of oral aperients.

- Combination of a softener and a stimulant - Coloxyl + Senna ii-iii up to TDS maximum in 24 hours
- Macrogol 3350 1-2 sachets BD PO Maximum daily dose 6 sachets if tolerated
- Osmolax powder 1- 2 level 17 g scoops BD – can sprinkle on food
- Oral Fleet if Macrogol 3350 unable to be tolerated / or faecal loading (suggested starting dose 3-5 mL BD) Maximum dose 10 mL TDS PO

B: Second-Line Treatment involves addition of rectal laxatives, with a combination of softener (glycerin suppository) and peristaltic stimulant (bisacodyl suppository).

- Combination of softener (glycerine suppository) and peristaltic stimulant (bisacodyl suppository).
- If bowels do not open after 24 hours administer microlax enema.
- If Microlax enema not effective and patient has a ballooned empty rectum, consider administering a high olive oil retention enema as softener and lubricant

Section 10 – References

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Version and Approval History

Date	Version number	Author and approval notes
31 January 2024	1.0	Guideline converted from SGH CLIN529 by Mary Lafferty, CNC Palliative Care, SGH and Palliative Care working party. Approved at SESLHD Drug and Therapeutic Committee and SESLHD Clinical and Quality Council.

Appendix A: Procedure for Administration of a Microlax enema

A DRE must be performed prior to insertion.

- Rectal laxatives are not first line choice and should only be used after optimisation of oral aperients, and following physical examination as per Appendix B – Digital Rectal Examination in SESLHDGL/098 - Bowel Management.
- Explain procedure to the patient.
- Position patient in left lateral position, knees bent. Ensure patient privacy and dignity.
- Place an absorbent pad underneath patient.
- Gently insert the lubricated enema tip into the rectum. If tip does not insert freely or patient complains of pain, stop immediately. Seek medical advice before continuing.
- Administer tube contents into rectum.
- Gently remove enema. Advise patient to remain in position and hold contents of enema in rectum for at least 10 minutes if possible.
- Provide access to toilet and ensure call button within reach.
- Return in 10 minutes to check patient and assist to toilet if required.

Appendix B: Interventions Related to DRE Findings for Constipation in the Palliative Care Patient