Guidelines for the Management of Constipation in Palliative Care

D Monnery,1 M Cooper,1 R Ayre,2 S Cureton,2 L Devlin,3 T Cookson,3 C Owens,3 S Schofield,3 G Sudworth,3 C Hyland,3 L Edmunds,1 L Waters,1 A Scott.4 (Guideline Development Lead).

1 The Clatterbridge Cancer Centre NHS Foundation Trust, Wirral, UK. 2 Bridgewater Community Healthcare NHS Foundation Trust, Wigan, UK. 3 Willowbrook Hospice, Prescot, Merseyside, UK. 4 Marie Curie Hospice, Liverpool, UK.

Summary of Main Recommendations

Diagnosis
- Constipation is a very common symptom in palliative care patients which can adversely affect their quality of life. Patients and healthcare professionals often differ in their assessment.3 [Level 3] It is important to explore the views of the patient and whether they believe themselves to be constipated. 3 [Level 3]
- The Bristol Stool Chart may be useful in helping to make a diagnosis of constipation.

Assessment
- Before starting any laxative medicine clinical assessment should exclude bowel obstruction.
- It may be appropriate to check the patient’s blood biochemistry and perform a digital rectal examination.
- Health professionals should assess for any factors potentially contributing to the constipation including: opioids;14 [Level 2+] mobility; fluid / dietary intake and environmental factors such as equipment needs.15 [Level 4]

Symptom Control
- Always give advice about non pharmacological measures. Further guidance on dietary advice can be found in Section 4.4 of this guideline.
- Laxative monotherapy should be used where possible, as it may avoid tablet burden and improve quality of life for the patient.25 [Level 4]
- The evidence base for the use of some laxatives is limited. Senna and lactulose have been shown to be effective when used as single agents and in combination.4,24 [Level 1] Other laxatives may also be considered. Please see Figure 1 and Table 3 in the guideline.
- If constipation persists despite the optimisation of oral laxatives, rectal interventions may be considered. A digital rectal examination will help to determine the most appropriate rectal intervention to use. Please see Figure 2.
- For patients with malignant spinal cord compression, rectal intervention should be given on alternate days and combined with an alternate day stimulant oral laxative such as senna.15 [Level 4] Please see Figure 2.

Communication
- Patients should be offered information about constipation at the time of diagnosis, and when starting any medicines which increase the risk of constipation e.g. opioids.15 [Level 4]
Section 1: Introduction

- Constipation is a very common symptom in palliative care patients.\(^1\) It has been shown to result in significant physical, psychological, social and existential problems affecting quality of life.\(^2\)

- Defining constipation is complicated by conflicting perceptions between patients and clinicians. Patients frequently describe constipation as an experience of bowel movements. Clinicians may define constipation based on the frequency of bowel movements.\(^3\) In general, the various definitions of constipation refer to: infrequent, difficult or incomplete bowel evacuation that may lead to pain and discomfort; stools that can range from small hard ‘rocks’, to a large bulky mass; and a sensation of incomplete evacuation.\(^4\)

- Due to the difficulties in defining constipation, the incidence is difficult to determine but has been estimated at between 18% and 90% of patients receiving palliative care.\(^5\)-\(^7\) The prevalence of contributory factors is estimated at between 25% and 90% of patients.\(^1\),\(^8\)

- The lack of a clear definition of constipation can contribute to difficulties and delays in reaching a diagnosis.\(^9\) No tools or criteria have been demonstrated to be consistently effective in helping to make an accurate diagnosis of constipation in patients receiving palliative care.

- Causes of constipation in the palliative care population are often multifactorial and include: poor dietary intake; physical inactivity; disease related and treatment related.\(^4\) The prevention and treatment of constipation is often related to the cause.\(^4\) Constipation in the majority of people receiving palliative care has the potential to be drug-induced and so management to promote satisfactory bowel movements commonly involves laxative administration.\(^4\),\(^10\)

- The benefits of treatment must be balanced against potential side effects. Many laxatives can contribute to discomfort by exacerbating colic or causing diarrhoea. Use of rectal interventions has implications for dignity and may not be acceptable to some patients. Management options should be discussed with the patient and /or those important to them, taking full account of their views and preferences.

- This guideline aims to give advice about the diagnosis, assessment and use of pharmacological and non-pharmacological measures which can be offered to relieve constipation in patients receiving palliative care. It is an update of “Guidelines for the Management of Constipation in Palliative Care” last reviewed in 2010.\(^1\) Management of bowel obstruction in palliative care is available separately and not covered in this guideline.\(^12\)

Section 2: Scope and Purpose

This guideline aims to inform practice in the assessment, diagnosis and management of constipation in patients receiving palliative care.
The guideline is aimed at specialist palliative care professionals including doctors, nurses, pharmacists and allied health professionals and generalists involved in providing palliative care e.g. general practitioners, district nurses, hospital doctors and nurses. This guideline is an update of Guidelines for the Management of Constipation in Palliative Care, 2010.11

Due to differences in approach and treatment, management of bowel obstruction is not covered in this guideline. There is a separate regional guideline for the medical management of malignant bowel obstruction in palliative care.12

The guideline aims to answer the following questions:-

1. What is the best method to assess patients for the presence of constipation in palliative care?
2. What methods of management are recommended in patients diagnosed with constipation in palliative care?

Table 1 summarises the scope and purpose of this guideline.

<table>
<thead>
<tr>
<th>Table 1 Scope of Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong></td>
</tr>
<tr>
<td>• People aged over 18 years with constipation receiving palliative care</td>
</tr>
<tr>
<td><strong>Populations not covered</strong></td>
</tr>
<tr>
<td>• People under 18 years</td>
</tr>
<tr>
<td>• People not receiving palliative care</td>
</tr>
<tr>
<td><strong>Healthcare setting</strong></td>
</tr>
<tr>
<td>• Community care</td>
</tr>
<tr>
<td>• Secondary care</td>
</tr>
<tr>
<td>• Tertiary care</td>
</tr>
<tr>
<td>• Hospice care</td>
</tr>
<tr>
<td><strong>Topics</strong></td>
</tr>
<tr>
<td>• Diagnosis and assessment of constipation in palliative care</td>
</tr>
<tr>
<td>• Management of constipation in palliative care</td>
</tr>
<tr>
<td><strong>Topics not covered</strong></td>
</tr>
<tr>
<td>• Bowel Obstruction</td>
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</tbody>
</table>

Section 3: Methods

This guideline is based on the AGREE II criteria, which can be found in the Cheshire and Merseyside Palliative and End of Life Care Network Audit Group Guideline Development Manual.13
3.1. **Clinical Questions and Interventions**

The clinical questions were derived from the previous guideline developed in 2008 and updated in 2010.\(^{11}\) These were refined by the Guideline Development Group which has authored this guideline. The clinical questions used to guide the literature review in PICO (Patient, Intervention, Control, Outcome) format are:-

1. In patients receiving palliative care and suffering from medication-induced constipation (P), is one method of management (I) superior to other methods or no formal method (C) in relieving constipation (O).

2. In patients receiving palliative care and suffering from non-medication-induced constipation (P), is one method of management (I) superior to other methods or no formal method (C) in relieving constipation (O).

3.2. **Outcomes**

To maximise patient comfort by ensuring the best assessment and treatment methods for patients with constipation receiving palliative care through:-

- improved knowledge of the assessment and diagnosis of constipation
- improved knowledge of the non-pharmacological and pharmacological interventions available
- promotion of education and training for all staff involved in caring for patients with constipation

3.3. **Literature Search**

Systematic electronic database searches were undertaken to find potentially relevant articles. MEDLINE, Embase, CINAHL and Cochrane databases were searched in July 2017. A full outline of the search strategy, results and appraisal of evidence can be found in Appendix 1. The grading of the level of evidence and recommendations follows the Cheshire and Merseyside Palliative and End of Life Care Network Audit Group Guideline Development Manual and uses SIGN criteria.\(^{13}\)

**Section 4: Guideline Recommendations**

4.1. **Assessment and Diagnosis of Constipation**

- Assessment of constipation is complicated by a difference in perception and definition between patients and clinicians.\(^{14}\) Health professionals' assessment of whether a patient is constipated, often differs from that of the patient.\(^3\) [Level 3]
- When assessing a patient and making a diagnosis of constipation it is important to elicit the views of the patient and clarify whether or not they think they are constipated.\(^3\) [Level 3]
An assessment of a patient with suspected constipation should include details of:
- Frequency of bowel movement
- Ease of defecation
- Consistency and volume of stool [Level 4]15

A Bristol Stool Chart which is based on stool consistency may also be of benefit in reaching a diagnosis of constipation.15 [Level 4] A link to a copy of the Bristol Stool Chart can be found here: [Link]

Clinical assessment should include a review of any medicines that may be contributing to constipation, including opioids.14 [Level 2+]

Clinical assessment should also review non-pharmacological contributory factors such as: mobility, fluid and dietary intake and environmental factors such as equipment needs.15 [Level 4]

Health professionals should perform an abdominal examination before making a diagnosis of constipation.15 [Level 4]

If a diagnosis of constipation is suspected, consider further investigations such as [Level 4]15
- Urea, electrolytes and adjusted calcium
- Rectal examination

The assessment should aim to exclude bowel obstruction before starting treatment.15 [Level 4]

4.2. The Mental Capacity Act, 2005

If a patient is shown to lack capacity to consent to treatment, the Mental Capacity Act, 2005 must be followed. If the patient lacks capacity to make decisions about their treatment, the known views of the patient should be explored, and the reasoning behind best interest decision making documented. The known views of the patient may be sought through the family, a nominated spokesperson or an advance statement. [Level 4]16

Lasting Power of Attorney for Health and Welfare, Advance Decisions to Refuse Treatment, Independent Mental Capacity Advocates and Deprivation of Liberty Safeguards should be utilised where appropriate.16 [Level 4]

4.3. Preventing Constipation

Preventing constipation or treating it effectively once present, depends on being able to identify those patients at risk. A retrospective cohort study included in this review has identified risk factors for developing constipation from both the patient and clinician perspective.14

For medical constipation (defined in this study as stool frequency <3 times per week), risk factors for the development of constipation are: being bed restricted; being treated on a palliative care ward; reduced fluid intake; needing assistance with personal care and patient tried medical self-management. 14 [Level 2+]
For patient perceived constipation (without reduction in stool frequency), risk factors are: being bed restricted; poor appetite; haemorrhoids; no information given on constipation; low satisfaction with information given on constipation; use of opioids; use of paracetamol; and absence of regular laxatives.\(^{14}\) [Level 2+]

Statistically significant key risk factors (when all results are combined) are detailed in Table 2.\(^{14}\) [Level 2+]

<table>
<thead>
<tr>
<th>Table 2. Key risk factors for the development of constipation [Level 2+](^{14})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being treated in a palliative care ward</td>
</tr>
<tr>
<td>Haemorrhoids</td>
</tr>
<tr>
<td>Heart disease</td>
</tr>
<tr>
<td>No information given on constipation</td>
</tr>
<tr>
<td>No laxatives available on request</td>
</tr>
<tr>
<td>No regular laxative use</td>
</tr>
<tr>
<td>Paracetamol</td>
</tr>
<tr>
<td>Poor appetite</td>
</tr>
<tr>
<td>Use of opioids</td>
</tr>
</tbody>
</table>

Patients who are likely to require higher doses of laxatives to effectively treat their constipation are: female; those with abdominal disease; taking an opioid; older.\(^{17}\) [Level 2]

Risk factors should be recognised and corrected where possible at the earliest opportunity to prevent constipation in high risk patients.\(^{15}\) [Level 4]

### 4.4 Non-Pharmacological Management

The non-pharmacological management of constipation should be tailored to any reversible causes detected during the clinical assessment. [Level 4]\(^{15}\)

Always give advice about: diet, fluid intake and mobility. Environmental factors should also be discussed e.g. correct posture; suitable and accessible toilet facilities (e.g. toilet seat raisers); allowing adequate time. Privacy and dignity should always be maintained. Changes to a persons’ care and regimen should be minimised in order to avoid constipation. For patients with constipation secondary to spinal cord compression. it is important to maintain a regular schedule for toileting.\(^{15}\) [Level 4]

Medications should be reviewed regularly to ensure that those which contribute to constipation are minimised as much as possible \([\text{Level } 4]\)\(^{15}\)

Related factors such as reduced mobility, reduced food intake, weakness and dehydration should be addressed where practical and appropriate.\(^{15}\) [Level 4]

### 4.4.1 Dietary advice

There is a lack of experimental studies assessing use of dietary fibre in the management of constipation in the palliative care setting. Recommendations are based on professional consensus and opinion.
For palliative patients that are able to maintain nutritional status through oral diet and fluids, patients are advised to aim for 30g fibre per day, including whole grains, fruit and vegetables. [18 Level 4]

Dietary fibre consumption should be gradually increased over a number of days to avoid gastrointestinal symptoms. [18 Level 4]

Information for healthcare providers and patients about high fibre diets is available here. [Link] [18]

The effects of increased fibre consumption may materialise over weeks and should be monitored alongside any potential reduction in pharmacological interventions. The average daily intake of dietary fibre in the UK is only 18g Meeting the recommendation of 30g/day will potentially be a challenge for patients. [19 Level 4]

The prescription of fibre containing complete oral nutritional supplements may be considered. However their nutritional value may not be equivalent to non fibre containing products. [15 Level 4]

A minimum daily fluid intake of 1.5 litres has been suggested but this may not be realistic. [20] Patients that are able to manage some oral dietary intake can maximise their fluid intake with foods containing a higher water content e.g. fruit, jelly, soups, sauces, mousses, ice cream, milky puddings and oral nutritional supplements where appropriate. [21 Level 4]

Patients that require a texture modified diet will potentially struggle to meet fluid requirements and optimise their fibre intake. These patients should be considered for referral to a dietetic service. [15 Level 4]

Patients who are in the last days or hours of life may not achieve adequate fluid and fibre intake. It may be more realistic to review pharmacological interventions. [15 Level 4]

Dietetic assessment and intervention should be considered to support patients and those important to them in translating recommendations into practical steps, enabling behaviour change and managing expectations. Fluid and nutritional intake can be a source of conflict and this can be addressed by these skilled professionals. [15 Level 4]

### 4.5 Pharmacological Management

#### 4.5.1 Management of General (non opioid induced) Constipation

- In many palliative care settings, current practice in the management of constipation is to use combination regimens. This often includes a stool softener and a stimulant laxative [22] although there is limited evidence to support this approach. [23 Level 4]
A recent Cochrane Review did not discover any experimental data where a single laxative was compared against placebo.\(^4\) We can therefore only comment on the apparent relative efficacy of medications for constipation. No Cochrane Reviews have been able to recommend any one specific laxative for the management of constipation in palliative care.\(^4,24\)

A combination of docusate and senna has been shown to be no more effective than senna monotherapy. However this was only a single study so should be interpreted with caution.\(^25\) [Level 1-]

Using laxative monotherapy where possible arguably also avoids tablet burden and improves quality of life for patients.\(^25\) [Level 4]

Senna and lactulose monotherapy are equally effective.\(^4,24\) [Level 1] However 40% of patients treated with monotherapy then required senna and lactulose combination therapy to relieve constipation. This suggests there is greater efficacy with a combination regimen, although it was not statistically significant.\(^4\)

Senna and lactulose combination therapy has been shown to be an effective combination and has demonstrated superiority over paraffin, magnesium hydroxide and co-danthramer.\(^24\) [Level 1]

Any increase in dose and addition of other laxatives should be undertaken gradually to avoid side effects such as colic and diarrhoea. Side effects are more common with higher doses and an increased numbers of laxatives.\(^24\) [Level 1]

Other medications such as macrogols, co-danthramer and magnesium hydroxide are not widely tested in a palliative care population but may be considered based on the experience of the prescriber.\(^15\) [Level 4]

The choice of laxative and risk of side effects should be discussed with the patient, and their views taken into account when prescribing any medicines.\(^15\) [Level 4]

For non opioid-induced constipation, a trial of combination laxatives at optimal doses should be followed by consideration of a rectal intervention unless there are any contraindications.\(^15\) [Level 4]

In the inpatient setting, oral laxatives should be reviewed every 3-4 days until the constipation has resolved.\(^15\) [Level 4]

Please see Figure 1 and Table 3 for advice on choice of laxative and dosage.\(^26\) [Level 4]

4.5.2. Management of opioid induced constipation

There is no evidence from this review that opioid rotation is more effective than laxative use in the treatment of opioid induced constipation.\(^24\)

Senna and lactulose combination therapy has been shown to be more effective than co-danthramer monotherapy in the management of opioid induced constipation at morphine equivalent doses of greater than or equal to 80mg/24h.\(^4\) [Level 1]
For patients with opioid induced constipation who do not respond sufficiently to other laxatives (approximately 50% in one study\(^{27}\)), naloxegol is superior to placebo in relieving constipation.\(^{27}\) [Level 1]

Naloxegol is more effective at higher doses, but titration should be undertaken cautiously as side effects are also more common.\(^{27}\) [Level 1]

If treating opioid induced constipation naloxegol has been recommended by NICE as a third line medicine when a trial of other laxatives has been unsuccessful.\(^{28}\)

If a patient with opioid induced constipation is unable to manage oral medication methylnaltrexone has been shown to be effective.\(^{29,30}\) [Level 1]

If using methylnaltrexone, 0.15mg/Kg is an effective dose and the effect is greater in those patients in whom opioid doses are higher. There are greater side effects, but no greater efficacy associated with increasing the dose of methylnaltrexone.\(^{30}\) [Level 1]

See Figure 1 and Table 3 for advice on choice of laxative and dosage.\(^{26}\) [Level 4]

### 4.5.3 Rectal Interventions

There is no experimental evidence to support the use of rectal interventions for constipation, or to direct the choice of rectal intervention. The following guidance is based on professional consensus and opinion.

The choice of rectal intervention should be based on the results of a digital rectal examination. (see Figure 2).\(^{15}\) [Level 4]

For patients with malignant spinal cord compression, a rectal intervention should be administered on alternate days and combined with an alternate day oral stimulant laxative i.e. senna.\(^{15}\) [Level 4] Please see Figure 2 for details.

### 4.6 Communication and Information

Inadequate information about constipation and the risk factors is linked with a higher number of patients developing constipation.\(^{14}\) [Level 2+]

Patients should be offered information about constipation at the time of diagnosis, or the possibility of developing constipation when starting medicines which increase this risk e.g. opioids.\(^{15}\) [Level 4]

Provision of information is currently lacking in UK practice. Written information about constipation would benefit patients.\(^{3}\) [Level 3]

Verbal or written information on constipation should include; risk factors, advice regarding self-care, the role of laxatives in managing constipation and when to seek medical advice.\(^{15}\) [Level 4]
Figure 1. Laxative choice for opioid induced \textsuperscript{27} [Level 1] and non-opioid induced constipation \textsuperscript{4,24,25} [Level 1] (Use of Macrogols, Co-Danthramer, Magnesium hydroxide and Rectal interventions \textsuperscript{15} [Level 4]).

\begin{itemize}
  \item \textbf{LACTULOSE}
  \item \textbf{OR}
  \item \textbf{SENNA}
  \item \textbf{LACTULOSE}
  \item \textbf{AND}
  \item \textbf{SENNA}
\end{itemize}

\begin{itemize}
  \item Opioid Induced Constipation
  \item \textbf{NALOXEGOL}
  \item (or methylnaltrexone if not able to take orally)
  \item Non-Opioid Induced Constipation
  \item Consider alternative laxative e.g. Macrogol, Co-Danthramer or Magnesium Hydroxide based on local prescribing practices and in discussion with the patient. Seek expert advice if unsure.
\end{itemize}

\begin{itemize}
  \item Rectal Interventions
  \item (According to rectal examination)
  \item Titrate dose
  \item Titrate dose
\end{itemize}
Figure 2. Choice of rectal intervention in severe constipation\textsuperscript{15} [Level 4]

- Rectal Examination
  - Impacted Hard Faeces
    - Bisacodyl plus glycerol suppositories
  - Impacted Soft Faeces
    - Bisacodyl suppository
  - Empty rectum plus loaded colon
    - Phosphate enema
  - If ineffective use enema
**Table 3 Pharmacological Options for the Management of Constipation in Palliative Care**

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Starting dose and titration advice</th>
<th>Dosing in renal impairment</th>
<th>Side effects</th>
<th>Contra-indications</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senna [Level 1]</td>
<td>Start with 15mg nocte. Increase to 15mg bd after 24-48h if no effect. If necessary increase to a maximum of 30mg tds.</td>
<td>No dose adjustment required.</td>
<td>Intestinal colic, diarrhoea, hypokalaemia in cases of profuse diarrhoea.</td>
<td>Intestinal obstruction.</td>
<td>Can be used in those who experience colic with stimulant laxatives.</td>
</tr>
<tr>
<td>Lactulose [Level 1]</td>
<td>Starting dose is 15ml bd of 10g/15mL solution. Titrate according to result. Maximum 45ml tds.</td>
<td>No dose adjustment required.</td>
<td>Abdominal bloating, flatulence, nausea, intestinal colic.</td>
<td>Intestinal obstruction. Use with caution in lactose intolerance Use with caution in diabetes due to sugar content.</td>
<td></td>
</tr>
<tr>
<td>Naloxegol (Moventig) [Level 1]</td>
<td>Start with 25mg once daily. Maintenance dose is 25mg once daily. Max dose 25mg od.</td>
<td>If creatinine clearance is less than 60 mL/min: Reduce starting dose to 12.5 mg orally once a day. May increase to 25 mg orally once a day as needed for symptoms, if tolerated.</td>
<td>Diarrhoea, intestinal colic, nausea.</td>
<td>Intestinal obstruction. Concomitant use of potent CYP3A4 Inhibitors is contraindicated. Caution is advised if concomitant use with moderate CYP3A4 inhibitors.</td>
<td></td>
</tr>
<tr>
<td>Glycerol Suppositories [Level 4]</td>
<td>One 4g suppository to be used when required.</td>
<td>No dose adjustment required.</td>
<td>Diarrhoea, faecal leakage.</td>
<td>Immediately post surgery involving pelvis.</td>
<td></td>
</tr>
<tr>
<td>Bisacodyl suppositories [Level 4]</td>
<td>One 10mg suppository to be used when required.</td>
<td>No dose adjustment required.</td>
<td>Diarrhoea, faecal leakage, local irritation.</td>
<td>Immediately post surgery involving pelvis.</td>
<td></td>
</tr>
</tbody>
</table>

**Starting Dose and Titration Advice**
- **Senna [Level 1]**: Start with 15mg nocte. Increase to 15mg bd after 24-48h if no effect. If necessary increase to a maximum of 30mg tds.
- **Lactulose [Level 1]**: Starting dose is 15ml bd of 10g/15mL solution. Titrate according to result. Maximum 45ml tds.
- **Naloxegol (Moventig) [Level 1]**: Start with 25mg once daily. Maintenance dose is 25mg once daily. Max dose 25mg od.
- **Glycerol Suppositories [Level 4]**: One 4g suppository to be used when required.
- **Bisacodyl suppositories [Level 4]**: One 10mg suppository to be used when required.

**Dosing in Renal Impairment**
- **Senna [Level 1]**: No dose adjustment required.
- **Lactulose [Level 1]**: No dose adjustment required.
- **Naloxegol (Moventig) [Level 1]**: If creatinine clearance is less than 60 mL/min: Reduce starting dose to 12.5 mg orally once a day. May increase to 25 mg orally once a day as needed for symptoms, if tolerated.
- **Glycerol Suppositories [Level 4]**: No dose adjustment required.
- **Bisacodyl suppositories [Level 4]**: No dose adjustment required.

**Side Effects**
- **Senna [Level 1]**: Intestinal colic, diarrhoea, hypokalaemia in cases of profuse diarrhoea.
- **Lactulose [Level 1]**: Abdominal bloating, flatulence, nausea, intestinal colic.
- **Naloxegol (Moventig) [Level 1]**: Diarrhoea, intestinal colic, nausea.
- **Glycerol Suppositories [Level 4]**: Diarrhoea, faecal leakage.
- **Bisacodyl suppositories [Level 4]**: Diarrhoea, faecal leakage, local irritation.

**Contra-indications**
- **Senna [Level 1]**: Intestinal obstruction. Use with caution in lactose intolerance Use with caution in diabetes due to sugar content.
- **Lactulose [Level 1]**: Intestinal obstruction. Concomitant use of potent CYP3A4 Inhibitors is contraindicated. Caution is advised if concomitant use with moderate CYP3A4 inhibitors.
- **Naloxegol (Moventig) [Level 1]**: Intestinal obstruction. Concomitant use of potent CYP3A4 Inhibitors is contraindicated. Caution is advised if concomitant use with moderate CYP3A4 inhibitors.
- **Glycerol Suppositories [Level 4]**: Immediately post surgery involving pelvis.
- **Bisacodyl suppositories [Level 4]**: Immediately post surgery involving pelvis.

**Notes**
- **Senna [Level 1]**: Can be used in those who experience colic with stimulant laxatives.
- **Lactulose [Level 1]**: Only to be used if constipation is felt to be due to opioids. To be taken on an empty stomach, 1 hour before or 2 hours after eating.
- **Naloxegol (Moventig) [Level 1]**: 15-30 minutes required to take effect.
- **Glycerol Suppositories [Level 4]**: 20-45 minutes required to take effect.
- **Bisacodyl suppositories [Level 4]**: 15-30 minutes required to take effect.

**Note:** The choice of medicines mentioned in this review should be undertaken with consideration of local prescribing practices and policies and reference to dosing advice in the BNF26 and PCF531 and discussion with experts if required.
Table 3 - (Continued). Pharmacological Options for the Management of Constipation in Palliative Care**

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Starting dose and titration advice</strong></td>
<td>Start with 1 sachet or 125ml of diluted oral liquid concentrate once a day. Increase to bd-tds if required.</td>
<td>If using Co-Danthramer strong suspension (75mg/5ml), start with 5ml nocte. If necessary, adjust every 2-3 days up to 10ml bd or 20ml nocte.</td>
<td>If used in combination with a stimulant laxative: 15-30ml bd. If used as monotherapy: 15-60ml bd.</td>
</tr>
<tr>
<td><strong>Dosing in renal impairment</strong></td>
<td>No dose adjustment required.</td>
<td>No dose adjustment required.</td>
<td>Risk of hypermagnesaemia is increased in renal impairment.</td>
</tr>
<tr>
<td><strong>Side effects</strong></td>
<td>Abdominal bloating, discomfort, borborygmi, hyponatraemia, nausea.</td>
<td>Intestinal colic, diarrhoea, discoloured urine, perianal irritation.</td>
<td>Oral magnesium salts act as antacids and the resulting increase in gastric pH may affect the absorption of other drugs if taken concurrently.</td>
</tr>
<tr>
<td><strong>Contraindications</strong></td>
<td>Stop if signs of fluid/electrolyte shift occur. Macrogol 3350 oral liquid is not authorised for faecal impaction.</td>
<td>Intestinal obstruction, non-terminal disease.</td>
<td>Hypermagnesaemia.</td>
</tr>
<tr>
<td><strong>Notes</strong></td>
<td>Onset of action is 1-2 days for constipation.</td>
<td>UK marketing authorisations for laxatives containing dantron are limited to constipation in terminally ill patients.</td>
<td>Nil.</td>
</tr>
</tbody>
</table>

**Note: The choice of medications mentioned in this review should be undertaken with consideration of local prescribing practices and policies with due consideration to dosing advice in the BNF**26 and PCF5**31 and discussion with experts if required.
Section 5: Standards

1. A clinical assessment should be completed and documented. The cause(s) of constipation should be documented. If an assessment cannot be made, the reason should be documented. [Grade D]^{15}

2. Before treating constipation, bowel obstruction should be excluded in all patients. [Grade D]^{15}

3. All patients commencing opioid therapy should be offered laxative monotherapy. [Grade D]^{15}

4. A digital rectal examination should be performed before giving any rectal intervention for constipation. [Grade D]^{15}

Section 6: Applications and Implications

The aim is to re-audit practice once change has been implemented. This guideline will be supplemented with the development of a patient information leaflet on constipation which will include risk factors, self-care, pharmacological management and advice on when to seek medical review.

This review has highlighted a number of unanswered questions in the research literature. It is hoped that further research on the efficacy of many laxatives in the palliative care population may be conducted in the future, as well as studies to improve the definition of constipation and enhance the development of diagnostic tools.

This guideline formed the basis of an abstract submission to the Association for Palliative Medicine 2018 Supportive and Palliative Care Conference to share the work and lessons learned to a wider audience.

Section 7: Acknowledgments and Declarations of Interest

Authors
- Dr Dan Monnery, Specialty Registrar in Palliative Medicine, The Clatterbridge Cancer Centre NHS Foundation Trust and Woodlands Hospice, Aintree, Liverpool.
- Mr Malcolm Cooper, Clinical Nurse Specialist in Palliative Care, The Clatterbridge Cancer Centre NHS Foundation Trust.
- Ms Rachael Ayre, Clinical Nurse Specialist in Palliative Care, Bridgewater Community Healthcare Foundation Trust, Wigan.
- Dr Susan Cureton, Specialty Doctor in Palliative Medicine, Bridgewater Community Healthcare Foundation Trust, Wigan.
• Ms Lucy Devlin, Staff Nurse, Willowbrook Hospice, Prescot, Merseyside
• Ms Tracey Cookson, Staff Nurse, Willowbrook Hospice, Prescot, Merseyside.
• Ms Catherine Owens, Staff Nurse, Willowbrook Hospice, Prescot, Merseyside
• Ms Susan Schofield, Staff Nurse, Willowbrook Hospice, Prescot, Merseyside
• Ms Gemma Sudworth, Staff Nurse, Willowbrook Hospice, Prescot, Merseyside.
• Mr Charles Hyland, Senior Staff Nurse, Willowbrook Hospice, Prescot, Merseyside.
• Ms Lauren Edmunds, Macmillan Oncology Dietician, The Clatterbridge Cancer Centre NHS Foundation Trust.
• Ms Liz Waters, Macmillan Dietician Team Leader, The Clatterbridge Cancer Centre NHS Foundation Trust.
• Dr Aileen Scott, Consultant in Palliative Medicine, Marie Curie Hospice, Liverpool (Guideline Development Lead).

Contributors

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The authors contributed as follows:-

**Literature review:** DM, RA, CO, CH, GS, LD, LE, LW.

**Audit tools:** AS, MC, SS, SC, TC

**Updated guidance and grading recommendations:** DM, AS, MC, RA

**Standards:** DM, AS, MC, RA

**Final writing of manuscript of guidelines:** DM, MC, CO, SS, LE, LW, AS.

**Section 8: Review Date**

The guideline will be reviewed three years after publication as outlined in the Cheshire and Merseyside Palliative and End of Life Care Network Audit Group Guideline Development Manual.

**Section 9: References**


15. Expert opinion based on group consensus at the Cheshire and Merseyside Palliative and End of Life Care Strategic Clinical Network Group Meeting on 16.11.17


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Appendix 1: Systematic Review Summary Form

Guideline Title: Assessment and Management of Constipation in Palliative Care.


What are the best methods of managing constipation in palliative care?

(Constipation AND palliat*) AND (treat* OR Manag*)

Records identified Medline (n = 331)
Records identified EMBASE (n = 617)
Records identified PubMed (n = 58)
Records identified CINAHL (n = 140)

Records screened (n = 1131)

Records after duplicates removed (n = 902)

Records remaining after title screening (unrelated to clinical question) (n = 124)

Records remaining after full text review (n = 11)
- Unrelated to clinical Question = 3
- Not in English language = 1
- Not fully published = 1

Records remaining after abstract screening (n = 16)
- Review article = 35
- Unrelated to clinical Question = 15
- Duplicate record = 57
- Case Report = 1

Articles included in final Guideline Development (n = 11)