Palliative approaches to the management of constipation – evidence and clinical implications for practice’

Prof Philip Larkin,
Professor of Clinical Nursing (Palliative Care)
UCD and OLHCS, Dublin Ireland
Update on the palliative management and prevention of constipation in palliative care patients.
Assessment, treatment and approaches to care
Specific reference to Opioid Induced Constipation (OIC)
Reference to recent Cochrane reviews on laxative effectiveness in constipation management.
So what is new?
What palliative guidelines currently exist?

2. The Management of Constipation in Palliative Care: Clinical Practice Recommendations. The European Consensus Group on Constipation in Palliative Care.
4. Palliative Care for the Patient with Incurable Cancer or Advanced Disease Part 2: Pain and Symptom Management Constipation.
Challenges to constipation management?

- Variable guidance on the diagnosis and management of chronic constipation in palliative care
- Insufficient consensus amongst key stakeholders on the impact of chronic constipation in palliative care patients
- Weak evidence base for the assessment and treatment of constipation
- Absence of clear and concise care pathways for assessment, treatment and evaluation
Why is practice so variable?

- Lack of evidence means ‘best practice opinion’ proliferates
The particular challenge of polypharmacy!
Some key principles to begin….

**Best practice point**

Where possible, the assessment and management of constipation should be delivered within a multidisciplinary team with a clearly identified clinical lead and active communication between all team members, including family.

Principles apply to all healthcare professionals providing generalist or specialist palliative care to patients with a life-limiting illness in hospital, hospice and community-based settings.

For those providing generalist palliative care, best practice should indicate when specialist advice should be sought.
Defining Constipation

• A balance between:
  (a) Objective measurable evidence (Defecation, stool picture)
  (b) Patient subjective experience of same.
  (c) An understanding of impact on the patient

Lack of a common definition that all practitioners agree.
How valid are Rome III criteria today?

Table 1 | The Rome III criteria for the diagnosis of irritable bowel syndrome, functional diarrhoea and chronic idiopathic constipation

<table>
<thead>
<tr>
<th>Functional bowel disorder</th>
<th>Symptom items included</th>
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</table>
| Irritable bowel syndrome          | Recurrent abdominal pain or discomfort ≥3 days per month in the last 3 months, with symptom onset ≥6 months prior to diagnosis, associated with 2 or more of:  
  a. Improvement with defaecation  
  b. Onset associated with a change in frequency of stool  
  c. Onset associated with a change in form of stool                                                                                                 |
| Functional diarrhoea              | Loose (mushy) or watery stools without pain occurring in ≥75% of stools for the last 3 months with symptom onset ≥6 months prior to diagnosis                                                                                                                                              |
| Chronic idiopathic constipation    | Two or more of the following for the last 3 months with symptom onset ≥6 months prior to diagnosis, with insufficient criteria for IBS:  
  a. Straining during ≥25% of defaecations  
  b. Lumpy or hard stools in ≥25% of defaecations  
  c. Sensation of incomplete evacuation for ≥25% of defaecations  
  d. Sensation of anorectal obstruction/blockage for ≥25% of defaecations  
  e. Manual manoeuvres to facilitate ≥25% of defaecations (e.g. digital evacuation, support of the pelvic floor)  
  f. <3 defaecations per week                                                                                                                                                                                               |
Why is constipation a clinical problem?

- Most common symptom in advanced illness.
- 30-90% patients report the problem depending on population
- Poorly recognised and often under-treated
- Lack of common definition amongst healthcare professionals
- Patients self-define and self-diagnose/treat
- Prescribing practice is inconsistent

Management and treatment should be improved!
The consequences of poor care and management

- Likelihood of greater suffering
- Risk of increased hospitalization
- Economic consequences largely undetermined but costly.
Resource implications of constipation management

- One observational study in one hospice unit over 6/12 period published
  - Cost = £2707.92 with average £38.62 per patient per month
  - 85% of cost was staff time
  - Total cost of £14,417.00 over 6/12 (inc. staff time)
- In community – one 2014 study
- Mean of 4 consultations in 12 months per person
- Average £38.00 per person per year
- Does not take into account co-morbidity.
Economic conclusions

Best Practice Point: Pharmacoeconomics

Where there is no evidence of a differential benefit between different medications in terms of efficacy, tolerability or side effect profile, and where clinical expertise allows, the medication with lowest cost base should be used.
## Factors – organic and functional

<table>
<thead>
<tr>
<th><strong>Organic Factors</strong></th>
<th><strong>Functional Factors</strong></th>
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<tbody>
<tr>
<td><strong>Pharmacological agents</strong></td>
<td><strong>Diet</strong></td>
</tr>
<tr>
<td>Opioid analgesics, anti-cholinergics, antacids, anti-convulsants, anti-emetics, anti-tussives, anti-diarrhoeals, anti-parkinsonians, neuroleptics, anti-depressants, iron, diuretics, chemotherapeutic agents</td>
<td>Anorexia, reduced food intake, poor fluid intake, low fibre diet</td>
</tr>
<tr>
<td><strong>Metabolic disturbances</strong></td>
<td><strong>Environmental/cultural</strong></td>
</tr>
<tr>
<td>Dehydration, hypercalcaemia, hypokalaemia, uraemia, hypothyroidism, diabetes mellitus</td>
<td>Lack of privacy, comfort or assistance with toileting, cultural sensitivities regarding defecation</td>
</tr>
<tr>
<td><strong>Weakness/fatigue</strong></td>
<td><strong>Other factors</strong></td>
</tr>
<tr>
<td>Proximal and central myopathy</td>
<td>Advanced age, inactivity, decreased mobility, depression, sedation</td>
</tr>
<tr>
<td><strong>Neurological disorders</strong></td>
<td></td>
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<tr>
<td>Cerebral tumours, spinal cord impingement or infiltration, autonomic dysfunction</td>
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<tr>
<td><strong>Structural abnormalities</strong></td>
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<tr>
<td>Pelvic tumour mass, radiation fibrosis,</td>
<td></td>
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<tr>
<td><strong>Pain</strong></td>
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<tr>
<td>Painful ano-rectal conditions, uncontrolled bone pain and other cancer pain</td>
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</tbody>
</table>
Grading of Quality [SIGN]

- A: Level 1 studies
- B: Level 2 or 3 studies
- C: Level 4 studies
- D: Level 5 studies or inconsistent or inconclusive studies of any level
**Key Finding**

A comprehensive assessment is required to accurately diagnose the presence and potential causes of constipation in patients with life-limiting illnesses.

**Recommendation 1 Constipation assessment**

**Key recommendations**

<table>
<thead>
<tr>
<th></th>
<th>1.1 A thorough history and physical examination are recommended as essential components of the assessment process.</th>
</tr>
</thead>
</table>
## Assessment

| D | 1.2 Constipation assessment scales may be useful in encouraging patient self-assessment or when communication is difficult. Due to a lack of evidence in the use of constipation assessment scales in day-to-day clinical practice they are not recommended for routine use. |
| D | 1.3 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 (following appropriate DRE training). |
| D | 1.4 Caution is advised when considering a DRE in immuno-compromised or thrombocytopenic patients. |
| D | 1.5 A plain film of the abdomen (PFA) is not recommended for routine evaluation but may be useful in combination with history and examination in certain patients. |
**Key finding**
Preventative measures for constipation should be ongoing throughout the patient’s disease trajectory. All patients on opioids require laxative therapy and education on management.

**Key recommendations**

<table>
<thead>
<tr>
<th>Recommendation 2 Prevention</th>
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<tr>
<td><strong>D</strong></td>
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<tr>
<td><strong>2.1</strong>  Education on the importance of non-drug measures is essential to enable patients and caregivers to take an active role in constipation prevention.</td>
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<tr>
<td><strong>D</strong></td>
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<tr>
<td><strong>2.2</strong>  Medications should be reviewed in order to identify potentially constipating agents and prophylactic laxatives prescribed when appropriate.</td>
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<tr>
<td>Unless there are existing alterations in bowel patterns (bowel obstruction or diarrhea) all patients prescribed regular opioids should be started on a laxative regimen and receive education on bowel management.</td>
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</table>
Non-pharmacology

Key finding
Non-pharmacological strategies in the management of constipation are at least as important as the use of pharmacological agents.

Recommendation 3 Non-pharmacological management

<table>
<thead>
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<tbody>
<tr>
<td><strong>3.1</strong> Attention should be paid to the provision of optimised toileting while ensuring adequate privacy and dignity for all patients.</td>
</tr>
<tr>
<td><strong>3.2</strong> Consideration should be given to lifestyle modification including the adjustment of diet and activity levels within a patient’s limitations.</td>
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</tbody>
</table>
Abdominal massage

- Encourages rectal loading by increasing abdominal pressure
- Generates an autonomic reflex to enhance bowel sensation
- Some evidence of benefit
- No real studies in non-cancer patients

Pharmacology management

Key finding

a. Pharmacological agents are a necessary component of the management of established constipation in life-limiting illness.

b. There is a lack of evidence to support the use of any one laxative over another.

Key recommendations

<p>| | |</p>
<table>
<thead>
<tr>
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<tr>
<td>D</td>
<td>4.1 The choice of laxative should be guided by individual patient preference and circumstances.</td>
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<tr>
<td>D</td>
<td>4.2 Where there is no evidence to differentiate between medications in terms of efficacy, tolerability and side effect profile, and where clinical expertise allows, the medication with lowest cost base should be used.</td>
</tr>
<tr>
<td>D</td>
<td>4.3 The combination of a softening and a stimulating laxative is often required. Optimisation of a single laxative is recommended prior to the addition of a second agent. The ratio of softener: stimulant should be guided by faecal consistency.</td>
</tr>
<tr>
<td>D</td>
<td>4.4 The laxative dose should be titrated daily or alternate days according to response.</td>
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</table>
The choice of enemas – are they a treatment of choice?

- Response and Acceptability
- Timing
- Phosphate and Arachis oil enemata– Evidence?
- Micro-enemata (Microlax)
Meta-analyses (11 studies): 41% of the 1025 patients in the studies\(^1\)

A survey of 2055 individuals using opioids to manage pain revealed that 57% reported constipation\(^2\)

About 40% of all patients on chronic opioid therapy\(^3\)

Up to 90% of cancer patients on chronic opioid therapy\(^3\)

### Key finding

Constipation is a common and distressing side effect of opioid therapy.

#### Key recommendations

|   | 5.1 The development of opioid induced constipation should be anticipated. A bowel regimen should be initiated at the commencement of opioid therapy. |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
|   | 5.2 In the management of opioid induced constipation, optimised monotherapy with a stimulant laxative is essential followed by the addition of a softener if required.                                                                 |
|   | The current evidence is too limited to provide evidence-based recommendations for the choice of stimulant laxative and selection should be made on an individual basis.                                    |
|   | 5.3 Where there is no evidence to differentiate between medications in terms of efficacy, tolerability and side effect profile, and where clinical expertise allows, the medication with lowest cost base should be used. |
|   | 5.4 The use of opioid receptor antagonists under specialist guidance should be considered in patients whose treatment is resistant to conventional laxative therapy.                                       |
Opioid receptor antagonists

- Methylnaltrexone (s/c 12mg daily)
- Naloxegol (OD oral therapy 12.5/25mg)
- Phase 3 placebo-controlled studies

- Lubiprostone (secretologue mediating GI secretions) 0.024mg BD
- 1 Phase 3 double-blind, placebo-controlled study

Studies on patients with non-cancer pain
Small study samples
Expensive treatment best reserved when oral methods fail
Stop oral laxatives before commencement (notably μ receptor antagonists)

Intestinal obstruction

Key findings

a. If intestinal obstruction is suspected, this should be evaluated by history, examination and appropriate radiological investigations.

b. Specialist referral for either surgical or medical management should be considered.

Recommendation 6 Intestinal obstruction

Key recommendations

<table>
<thead>
<tr>
<th>D</th>
<th>6.1 A stool softener should be considered in partial intestinal obstruction. Stimulant laxatives should be avoided.</th>
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<tbody>
<tr>
<td>D</td>
<td>6.2 In complete intestinal obstruction, the use of all laxatives should be avoided as even softening laxatives have some peristaltic action.</td>
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</tbody>
</table>
Last days of life – changing goals of care

Recommendation 7 Management of constipation in the dying patient

Key finding
In the last days of life, bowel movements become less frequent as a consequence of proximity to death.

Key recommendations

| D | 7.1 As a patient’s level of consciousness deteriorates, oral laxatives should be discontinued. Rectal intervention is rarely required at this stage. |
GUIDING THE PATIENT IN PLAIN ENGLISH PLEASE!

http://www.hse.ie/palliativecareprogramme

Mobility
Exercise promotes regular bowel habit, so it can be helpful to be as active as you can manage.

Laxatives
Laxatives can be classified into two broad categories: those that act to predominantly soften faecal matter and those that stimulate bowel movement.

There is a lack of evidence to support the use of any one laxative over another and so the choice of laxative is guided by individual preference, circumstances and cost. For example, some people prefer liquid laxatives to tablets, and some laxatives are more expensive than others.

The combination of a softening and a stimulating laxative is generally recommended to best manage constipation. Dosage of laxatives should be gradually increased daily or every second day until the constipation resolves.

Is prevention better than cure?
Yes! It is much easier to prevent constipation than to treat it once established. If you are taking painkillers such as morphine, this is particularly important and it is almost always necessary to take a laxative regularly if you are also prescribed morphine.
How do we know if we are getting it right?
Death by Audit!

- History and thorough physical examination
- Digital rectal examination (DRE)
- Use of Plain Film Abdomen (PFA)
- Education on patient self-management
- Optimised toileting
- Evidence of lifestyle modification
- Use of single/combination laxative therapy
- Commencement of bowel management in opioid therapy
- Stimulant laxation in OIC
- Use of Opioid receptor antagonists
- Management of obstruction (no laxatives)
Conclusions

• How far is the management plan a joint effort between clinician, patient and family?
• What messages do we need to give patients and families about the management and treatment of the problem?
• How well do we assess success and manage failure?
• A priority symptom to be addressed?
Thank you for your attention.