Constipation in palliative care: do we need to re-think our approach?

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Scope of the problem?

- It is repeatedly stated in palliative care that constipation is:
  - Common
  - Distressing
  - (and inevitable?)

- In real terms, based on a longitudinal study of Australians, 50% of people at the time of referral to SPC self-reported disturbed bowel function with 85% self-describing problems over time cared by Specialist palliative care services

Despite the fact that so many palliative care patients experience problems, a systematic, step-wise approach that ensures effective palliation of disturbed bowel habits remains elusive

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1. Constipation in palliative care is the passage of small, hard faeces infrequently and with difficulty
2. Daily monitoring of bowel actions is necessary to ensure good palliation of bowel symptoms
3. The Bristol stool form guide may help titrate laxatives in palliative care patients
4. Opioids are the main factor likely to contribute
5. A plain radiograph of the abdomen is useful to diagnose constipation and assess the severity of the problem
6. Rectal interventions should be avoided
7. Combinations of softeners and simulants are required to best palliate constipation

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Clinical recommendation 1

- Constipation in palliative care is defined as the passage of small, hard faeces infrequently and with difficulty

- A recent review of studies undertaken to explore treatments of constipation revealed that 20 papers specifically aiming to report the effectiveness of constipation treatments in palliative care with 6 different definitions of constipation used

Lack of agreed definition in palliative care

- Mostly, people are diagnosed with constipation when they experience problems with most attention paid to the frequency with which people actually pass bowel actions

- In contrast, chronic constipation is viewed as a ***symptom complex that occurs as the result of physical changes to the colon or pelvic floor***

Lack of agreed definition in palliative care

The symptom complex in chronic constipation includes:

Straining +/-
Dissatisfaction +/-
Lumpy or hard stools +/-
Sensation of blockage +/-

Digital manoeuvres +/-
Fewer than 3 bowel actions per week +/-
Inability to pass loose stools without laxatives

Do palliative care patients experience similar problems?

Comparisons of chronically constipated patients and palliative care patients taking laxatives		
Parameter	Palliative care cohort	Chronically constipated
Stool frequency per day	1.10 +/-0.07	1.2+/- 0.2
Stool consistency	4.39 +/-0.24	2.8 +/- 0.5
Incomplete evacuation (% bowel movements)	67%	74%
Bowel actions per week without standard laxatives	0.58 +/-2.7	2.1+/- 0.8

Clinical recommendation 2

- Daily monitoring of bowel actions is useful to ensure good palliation of bowel symptoms
- 76% of surveyed palliative care patients well enough to participate describe passing daily to second daily bowel actions
- However, despite this, the majority of people remained symptomatic with pain, bloating, straining, a sense of obstruction & dissatisfaction
- Such symptoms are summarized using the PAC-SYM

PAC-SYM	Abdo symptoms	Rectal symptoms	Difficulty opening bowels
Palliative care patients on laxatives	1.89 ± 0.91	0.57 ± 0.73	1.37 ±0.92
Chronic constipation dissatisfied with treatment	1.68 ± 0.90	0.73 ± 0.80	1.68 ±0.80
Mildly constipated	0.63 ± 0.75	0.43 ± 0.72	0.79 ±0.94

SAS bowels versus daily bowel charts?

- As part of a larger study of constipation, participants were asked to keep a bowel diary which included:
- Bowel action today?
- Straining (yes/no)
- Satisfaction (yes/no)
- Pain (yes/no)
- Bloating (yes/no)
- SAS bowels
- The aim of this sub-study was to examine if there was any correlation between 1). patient's reports of whether bowels opened today and other constipation symptoms and 2). SAS bowels and other bowel symptoms The Bristol stool chart is useful to titrate laxatives

SAS bowels versus daily bowel charts?

- The results highlighted that on the days that people passing a bowel action strongly correlated with straining and sensation of incomplete evacuation
- On the other hand, regardless of whether people had passed a bowel action, increased SAS bowels scores significantly correlated with pain, bloating, straining and decreased likelihood of a sensation of complete evacuation ($P<0.05$ for all parameters)
- In summary, much more information is obtained by asking peoples to rate their concerns which may or may not include whether or not bowels were opened

Clinical recommendation 3

- The Bristol stool chart is useful to titrate laxatives
- The Bristol stool chart is a non-invasive and validated approach to assessing colon transit times for people not currently receiving laxatives
- Chronically constipated patients with proven slow transit times are highly likely with laxatives to pass frequent and very soft stools
- Despite this, they remain highly symptomatic highlighting that monitoring stool frequency and form alone is inadequate

Clinical recommendation 4

- Opioids are the main factor that contribute to the problem of constipation in palliative care
- Opioids remain the most investigated and cited risk factor for constipation in palliative care, based on the well documented fact that opioids:
  - Reduce peristalsis
  - Reduce the urge to defeacate
- However, increasing data supports other precipitating factors may be equally significant

- Retrospective data suggests that the higher the calculated anticholinergic load the greater numbers of laxatives prescribed
- Deteriorating performance status correlated with increased number of laxatives and decreased frequency with which bowel actions reported
- Deteriorating performance status correlated with increased number of laxatives and decreased frequency with which bowel actions reported
- Proximity to death correlates with increased severity of self-reported bowel symptoms
- The higher the measured serum anticholinergic level, the more likely people are to be prescribed combinations of laxatives (stimulant and non-stimulant) simultaneously

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Some factors likely to induce slow transit:

Decreased functional status
Electrolyte disturbances
Renal dysfunction
Diabetes
Decreased availability of acetylcholine
Poor oral intake
Low BMI
Idiopathic slow transit constipation

Some factors likely to affect the pelvic floor:

Myopathy
Neuropathy
Idiopathic pelvic dyscoordiantion

Clinical recommendation 5

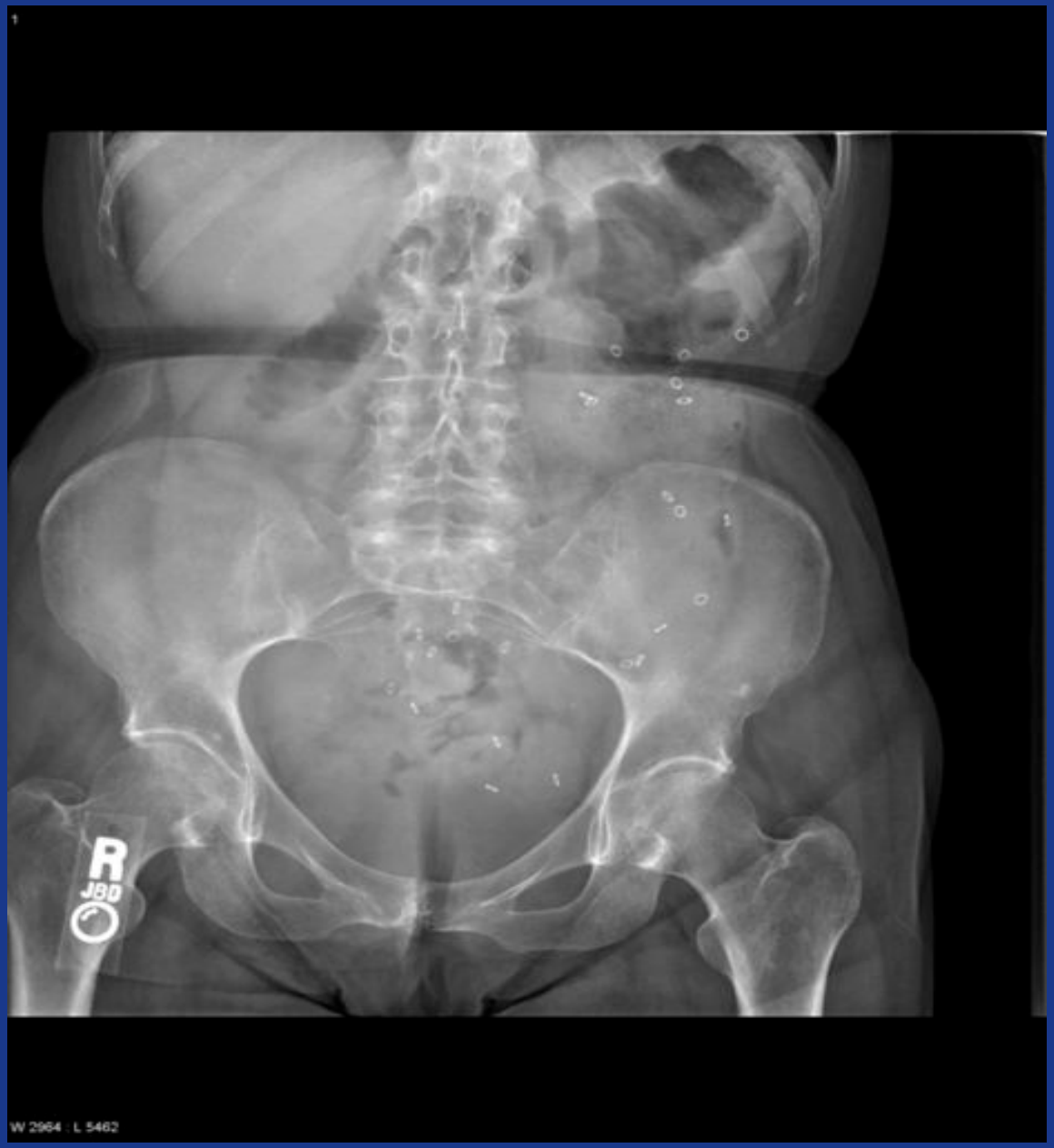
- Plain radiographs are a useful tool to assess the severity of constipation
- Clinical guidelines recommend radiographs based on the assumption that the appearance of faecal shadowing represents the burden of problems
- However, this assumption is flawed as it presumes that there is a reliable filling and emptying of the bowel

Clinical recommendation 5

- In order to examine this in more detail, clinicians were asked to report plain abdominal radiographs with their reports compared with:
  - Each other's reports
  - Whether or not people were objectively diagnosed with constipation based on colon transit studies
  - Patients' self-reports of their symptoms

Clinical recommendation 5

- Despite the fact that this is considered routine in palliative care this work revealed:
  - Very poor agreement between clinicians
  - No relationship between the radiograph and objectively measured colon transit times
  - No correlation between the degree of feacal loading and patients' symptoms



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Clinical recommendation 6

- Rectal interventions should be avoided
- In contrast to palliative care, evidence-based guidelines in gastroenterology and colorectal surgery suggest that people with difficult to treat constipation should undergo a series of investigations to assess whether the problems experienced by people reflect either or both:
  - Neuromuscular dysfunction of the colon
  - Neuromuscular dysfunction of the pelvic floor

Clinical recommendation 6

- This is important to consider when considering the optimal way to manage the problem
- Evidence-based guidelines to manage functional constipation recommend that the first step to consider when pelvic floor problems are considered the cause of the issue is bisacodyl suppositories
- While this still requires more attention in palliative care, it highlights the importance of thorough assessments which includes PR

Clinical recommendation 7

- Combination softeners and stimulants are required
- Once a bowel obstruction is excluded, patents are commenced on laxatives with guidelines recommending a combination of softener plus stimulant
- The actual guidelines suggest polyethylene glycol and electrolytes or lactulose co-prescribed with a stimulant with the recommended agents including senna or sodium picosulphate

Current management approaches

- Despite such recommendations, reports suggest management is most remarkable for the number of people who fail to achieve adequate symptom control

- 40-70% of palliative care patients treated with laxatives (including peripheral opioid antagonists) continue to experience symptoms and dissatisfaction with bowel habits

Docusate with senna

- Docusate with Senna is very commonly recommended as the initial agent in palliative care
- This based on the assumption that both actions are necessary with anecdotal recommendations suggesting that the docusate is necessary to reduce abdominal cramping due to senna discomfort
- However, objective studies do not support this with better evidence for senna alone

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What do we need to know?

- Like gastroenterology, an agreed approach to assessing the constipation symptom complex is required with the approach contextualised to the stage of illness

- This work must be underpinned by research which improves our understanding as to how physical function changes with time, medications, co-morbid illnesses and a past history of bowel dysfunction

Why is this work important?

- Already data exists that supports that disturbed bowel function in palliative care is associated with both personal and societal costs:
  - Quality of life
  - Hospitalization
  - Health professionals
  - Medications

What do we do in the interim?

- History and physical examination including PR
- Adequate hydration
- Regular senna or Movicol +/- suppository
- Routine
- Review

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