End of Life - Bowel Care

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End of Life Bowel Care

- **Neurogenic bowel** can result from any pathological process involving any component of the CNS and or the extrinsic and the intrinsic nervous system of the bowel.

- Both faecal incontinence & constipation are common in those with end stage neurological disease.
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• Management can be a fine line between helping constipation and causing faecal incontinence.
• Effective neurogenic bowel care carries significant resource implications.
• Most common are those with Strokes, MS, SCI, Parkinson’s Disease, Motor Neurone Disease, Spinal cord compression.
Government reforms

End of Life Care Strategy (DoH 2008),

Core competencies for end of life (EOL) care (DoH 2009)

- Communication
- Assessment and care planning
- Symptom management, comfort and well being
- Advanced care planning
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• Causes of constipation
  - Combination of the disease, the treatment and or general debility
  - Main contributing factors for constipation are the well-known trio of:
    • Insufficient fibre
    • Poor fluid
    • Reduced mobility - general weakness and fatigue due to inactivity and bed rest.
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Constipation

- Bowel interventions for severe constipation or faecal loading are invasive and uncomfortable particularly in the last hours of life and need to be prevented.
- The need to treat constipation is a failure in prevention (Regnard and Tempest 1998).
- **Proactive** approach needs to be adopted to prevent constipation or faecal loading occurring at the end of life (NICE 2007).
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- Poorly managed constipation can lead to disabling complications for the patient causing the onset of secondary problems:
  - urinary retention
  - urinary incontinence
  - delirium in the older patient.
- A dying patient with a full, uncomfortable rectum may present with terminal agitation/restlessness.
Terminal restlessness / agitation

• Dramatic end of life symptom
• Multifactorial
• Distressing for the family – witnessing someone they love in anguish, may affect bereavement outcome
A proactive approach to constipation

• Understanding the risk factors
  - Fluid
  - Diet
  - Mobility
  - Privacy
  - Medication
  - Medical condition
# Norgine® Risk Assessment Tool for Constipation

<table>
<thead>
<tr>
<th>Medical Condition</th>
<th>Toileting Facilities</th>
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<tbody>
<tr>
<td>Cancer</td>
<td>Bed pan</td>
<td></td>
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<tr>
<td>Clinical depression</td>
<td>Commode by bed in</td>
<td></td>
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<tr>
<td>Diabetes</td>
<td>hospital/care home</td>
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<tr>
<td>Haemorrhoids, anal fissure, rectocele, local anal or</td>
<td>Supervised use of</td>
<td></td>
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<tr>
<td>rectal pathology</td>
<td>lavatory/commode</td>
<td></td>
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<tr>
<td>History of constipation</td>
<td>Commode/raised toilet</td>
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<tr>
<td>Impaired cognition/dementia</td>
<td>at home (without</td>
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<tr>
<td>Multiple Sclerosis</td>
<td>foot stool)</td>
<td></td>
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<tr>
<td>Parkinson's disease</td>
<td>Restricted to bed</td>
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<tr>
<td>Post operative</td>
<td>Restricted to</td>
<td></td>
</tr>
<tr>
<td>Rheumatoid arthritis</td>
<td>wheelchair/hoist</td>
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</tr>
<tr>
<td>Spinal cord condition (injury, disease or congenital)</td>
<td>Walks with aids/</td>
<td></td>
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<tr>
<td>Stroke</td>
<td>assistance</td>
<td></td>
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<tr>
<td>Spinal cord condition (injury, disease or congenital)</td>
<td>Walks short distances</td>
<td></td>
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<td>but less than</td>
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<td></td>
<td>1/3 mile (0.5km)</td>
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<tr>
<td>Current Medication</td>
<td>Nutritional Intake</td>
<td></td>
</tr>
<tr>
<td></td>
<td>At nutritional risk</td>
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<td>as identified by</td>
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<td>local nutritional</td>
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<td></td>
<td>screening tool</td>
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<td></td>
<td>Fibre intake 5g or</td>
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<td>less per day</td>
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<td></td>
<td>Difficulty in</td>
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<td></td>
<td>swallowing/eating</td>
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<td></td>
<td>Needs assistance to</td>
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<td></td>
<td>eat</td>
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<tr>
<td></td>
<td>Daily Fluid Intake</td>
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<td>(see below for</td>
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<td></td>
<td>calculation table)</td>
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<tr>
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<td>Minimum fluids not</td>
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<td>achieved</td>
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</tbody>
</table>

**Fluid Requirement Calculation**

30ml fluid per 1kg of body weight

Patients minimum fluid intake should be:

\[ \text{Weight in kg} \times 30 \text{ml} \]

Patients actual fluid intake is:
Action to take when risk of constipation is identified

The Norgine Risk Assessment Tool of Constipation was developed to raise awareness of a patient’s risk of becoming constipated and to encourage proactive assessment and, if necessary, treatment. Healthcare professionals should monitor and risk assessment score and take reasonable steps to reduce the score over time e.g. by increasing fluids, increasing fibre in diet, improving mobility, reducing polypharmacy etc. For patients with a Risk Assessment score greater than 4 ticks, it is recommended that the patient is fully assessed as outlined in the check list below.

**CHECKLIST**

- Complete full bowel assessment using locally approved care pathway
- Monitor and record bowel movements daily using the Bristol Stool Chart and bowel record chart
- Stool type 1 or 2 prescribe appropriate laxative therapy
- Advise on toileting position
- Review medication including over the counter medicines
- Advise on ways to improve mobility
- Encourage patients to achieve at least minimum fluid intake
- Improve nutrition according to nutritional intake score

In addition to general treatment advice available from continence advisor, doctor clinical nurse specialist and pharmacist, certain risk factors may be addressed by referring a patient to a dietician, speech and language therapist, occupational therapist, dentist, podiatrist and physiotherapist.

Information about your local Continence Advisory Service can be found at the Continence Foundation web site: www.continence-foundation.org.uk

**THE BRISTOL STOOL FORM GUIDE**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Description</th>
<th>Action(s)</th>
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</thead>
<tbody>
<tr>
<td>TYPE 1</td>
<td>Separate hard lumps, like nuts (hard to pass)</td>
<td>Constipated. Commence or increase laxatives</td>
</tr>
<tr>
<td>TYPE 2</td>
<td>Sausage-shaped but lumpy</td>
<td>Constipated. Commence or increase laxatives</td>
</tr>
<tr>
<td>TYPE 3</td>
<td>Like a sausage but with cracks on its surface</td>
<td>Ideal Stool Consistency: Maintain laxative dose</td>
</tr>
<tr>
<td>TYPE 4</td>
<td>Like a sausage or snake, smooth and soft</td>
<td>Ideal Stool Consistency: Maintain laxative dose</td>
</tr>
<tr>
<td>TYPE 5</td>
<td>Soft blobs with clear-cut edges (passed easily)</td>
<td>Slightly Too Soft. Decrease laxative dose</td>
</tr>
<tr>
<td>TYPE 6</td>
<td>Ruffly pieces with ragged edges, a mushy stool</td>
<td>Too Soft. Decrease laxative dose</td>
</tr>
<tr>
<td>TYPE 7</td>
<td>Watery, no solid pieces</td>
<td>Too Soft. Stop taking laxatives for a day or so</td>
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**DAY**

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</tr>
</tbody>
</table>

**NUMBER OF BOWEL MOVEMENTS TODAY**

**TYPE OF BOWEL MOVEMENT (SEE ABOVE)**

The Norgine Risk assessment Tool for Constipation was developed by Gaye Kyle, Senior Lecturer, Thames Valley University, Terri Dunbar, Advanced Nurse Practitioner, Berkshire West PCT and Phil Prynn, Continence Services Manager, Berkshire West PCT to encourage health care professionals to adopt a proactive approach to bowel care. We believe that this risk assessment tool will evolve over time and would like to hear any feedback you may have or if you would like to request more copies of this tool, please email mss@norgine.com

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End of life bowel care

Aim of care

• The goal of treatment of constipation should be the comfortable passage of stool, rather than a specific frequency of bowel movement

• Reducing the bothersome scale (constipation or faecal incontinence)
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- No clear definitive definition for constipation
- Subjective
- European Consensus Group on constipation in palliative care support the view that it should be the patient who fundamentally defines constipation (Larkin et al. 2008).
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Assessment is complex

• No comprehensive validated assessment tool.

• Assessment of constipation in palliative care (EOL) continues to be poor, due to other symptoms being perceived to be more of a priority (Bruera et al 1994).

• EOL assessment continues to be based on bowel frequency (Goodman et al 2005)
Management of constipation

• Lifestyle advice has limited value
  – Fluids
  – Fibre
  – Mobility
Management – Complementary therapies

- Abdominal massage - perceived as relaxing and giving relief from ‘trapped wind’ by most patients.
- Reflexology
- Acupuncture.
- Further research is required to determine the effectiveness of all these therapies.
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- Laxatives appear less efficient in palliative care.
- Higher doses may be required due to opioid medication.
- Opioids have a profound effect on the management of constipation at the end of life.
Constipation at end of life

Opioids

- the most common example being morphine.
- effective and well established treatment
- for moderate to severe pain and breathlessness at end of life.
Constipation at end of life

Opioids

- 87% of patients with malignant disease will experience pain
- 67% of patients with non-malignant disease will experience pain
- Much of this pain will be treated with opioid medication
Opioids

- Existence of 3 main classes of opioid receptors mu, kappa and delta in the body.
- These are responsible for mediating the peripheral and central action of opioids.
- The gastrointestinal effects of opioids are predominantly mediated by the mu$_2$ receptors.
Effects of opioids on the gut

- Delays gastric emptying due to constriction of pyloric sphincter
- Impaired transit through ileocaecal sphincter & the colon → weak gastro colic reflex.
Effects of opioids on the gut

- Reduction in propulsive component of gut motility, and increased non-propulsive activity due to enhanced ring contractions → leading to more efficient absorption of water and electrolytes.
- Enhanced internal anal sphincter tone - thus weakening the defaecation reflex
Effects of opioids on the gut

- Acetylcholine reduced \((\text{excitatory neurotransmitter})\)
- Serotonin released, increases release of noradrenaline "inhibition of intestinal secretions"
End of life bowel care

Opioid induced constipation
- Profoundly affects patients’ quality of life.
  - Refuse analgesia
  - Preoccupation with bowels
- Increased pain (abdominal)
- Increase use of medical and nursing time.
- Admission to hospice or hospital
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Opioid induced constipation
- Strain on carers
- Need for invasive interventions (rectal intervention and or digital removal of faeces)
- Confusion with malignant intestinal obstruction
- Terminal restlessness / agitation.
Definition

opioid induced constipation?

- Constipation will have developed or become exacerbated due to the introduction of an opioid medication.
- Prescribed laxatives become less reliable necessitating larger doses.
- Opioid induced constipation is NOT dose-dependent (Fallon & Hanks 1999)
Opioid induced constipation.

- Methylnaltrexone bromide is a selective peripheral antagonist of opioid binding at mu opioid receptors.
- Methylnaltrexone bromide relieves OIC via 12mg/0.6ml solution for subcutaneous injection.
Opioid induced constipation

- Quick acting, short half life
- Bowel action experienced within 4 hours often much less
- Less invasive than rectal intervention.
- Enhances patients’ QOL?
Patient complains of constipation

Full bowel assessment

Assess causes and risks

Exclude malignant obstruction

Correctable

Treat causes and risks

Not correctable

Treat constipation

1\textsuperscript{st} line, Oral laxative - softener plus stimulant

Improvement of symptoms

Continue with laxative regime

No improvement of symptoms

2\textsuperscript{nd} line consider using peripheral specific opioid antagonist if OIC suspected or rectal intervention,

No improvement of symptoms

3\textsuperscript{rd} line, consider using peripheral specific opioid antagonist if OIC suspected, DRF

?
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Faecal incontinence
- Faecal incontinence can be a sign of imminent death (WHO 2003).
- Commonest cause is faecal impaction (spurious diarrhoea)
- Avoid invasive procedures
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Faecal incontinence

• Symptomatic of end stage disease - dementia.
• Treat faecal impaction
  • Movicol, rectal intervention, DRF
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Faecal incontinence (impaction)

• Movicol is currently the only laxative recommended for faecal impaction in the UK.
• Suppositories and enema.
• Digital removal of faeces – issues of competency.
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Faecal incontinence management

- If faecal incontinence is very loose at the end of life consider a faecal collection system (NICE 2007),
Faecal Collectors

For patients with liquid or semi-liquid faecal incontinence

Fig. 1: Faecal Collector
Management faecal incontinence

- Patients with liquid or semi-liquid faecal incontinence, Flexi-Seal® FMS Convatec – closed, non latex system
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Faecal incontinence:
Anal plugs:
- Patients cannot always tolerate defaecation reflex
- Not suitable for patients with frequency, infectious diarrhoea or inflammation
- Can use up to 12 hrs
- Very good for a few who have loss of sensation
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Trans anal irrigation

• Complete system for managing neurogenic bowel dysfunction.
• Proven reduction of faecal incontinence and constipation
• Self-administration of the system increases the patients’ independence, dignity and quality of life.
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• Care of the dying is urgent care only one opportunity to get it right (National audit of care of the dying in hospitals in England 2007)

• Competencies

• Proactive approach needs to be adopted to prevent constipation or faecal loading occurring at the end of life (NICE 2007).

• Lack of knowledge/training of health care professionals, particularly in care homes (End of life Care National Audit Office 2008)

• Knowledge of laxatives and bowel interventions.
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• The concern for quality of life is imbedded in the philosophy of palliative care.
• Aspects of bowel dysfunction are not always predictable.
• It is not easy to maintain a patient’s dignity whilst giving the intimate care associated with continence.
• Neither is it always possible to involve patients in decision marking at this time of their life.
• Bowel care at end of life must be evidence based and remain ever mindful that dignity and quality of life are paramount.