



Best Practice Guidance – Bowel Care in Critical Care

These recommendations are based on the current evidence and best practice at the time of writing and so will be subject to change as further developments are made in this field.

Introduction

Bowel care is a fundamental area of patient care that is frequently overlooked yet it is of paramount importance for the quality of life of service users, many of whom may be reluctant to admit to bowel problems or to discuss such issues (Royal College of Nursing (RCN) 2012). Robert Francis (2013) in his report into the Mid Staffordshire NHS Foundation Trust referred to continence as 'this most basic of needs', his report highlighting significant concerns in this area of care.

Constipation and diarrhoea are not uncommon in ACC.

Gut motility can be altered due to

- immobility
- effects of particular medications,
- infection,
- admitting diagnosis.

The maintenance of usual bowel function is desirable to promote recovery

The use of a bowel management guideline in ACC can be linked with a reduction in the incidence of constipation (Ritchie et al 2008) and can be a useful tool for the maintaining good bowel function (McPeake et al, 2011).

The aim of the guideline is to promote and maintain normal bowel function, with early recognition and treatment of bowel dysfunction.

The guideline is intended to be followed by nursing staff caring for critically ill patients on the critical care unit, taking into account the following criteria:

1. All nursing staff will have had education in the principles of bowel management for the prevention or resolution of constipation and diarrhoea during their induction period.
2. All nursing staff will have been instructed in the safe and effective administration of all bowel care interventions whilst respecting the patient's right to privacy.
3. All relevant protocols and flowcharts will be available on the Critical Care Unit.
4. All necessary equipment and medication will be available on the Critical Care Unit.
5. Medical staff will be involved throughout the process.

Statement on intent

This guideline is not intended to be construed or to serve as a standard of medical care. Standards of care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns of care evolve. These parameters of practice should be considered guidelines only. Adherence to them will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. It is advised however that significant departures from the national guideline or any local guidelines derived from it should be fully documented in the patient's case notes at the time the relevant decision is taken.

Patient Assessment

Prior to performing a physical assessment the following information on the patient's bowel pattern /habits should be obtained:

- What are the patient's usual bowel habits?
- Does the patient usually take aperients?
- What is the regular dietary, fluid and exercise routine?
- Are there contraindications to the use of aperients with the patient?
- Does the patient's clinical condition warrant their bowels open. e.g. abdominal surgical patients.
- Could there be a metabolic or physical cause for their constipation eg.hypocalcaemia, spinal cord compression, tumour infiltration, ileus or obstruction?
- If being enterally fed, what is the amount of aspirate? Is the patient absorbing feed? Refer to Enteral Nutrition guideline.

Physical Assessment

At the commencement of each shift and then prn.

- Abdominal examination
 - Expose and observe the abdomen, look for distension
 - Auscultate for presence of bowel sounds - if present, note pitch
 - Palpate for tenderness, tightness/rigidity
 - Document passing flatus, bowels open and quantity/nature of faeces.
- Inform the ICU Medical Team if there are any of the following signs:
 - Increasing tenderness, distension/rigidity
 - Decreased/high pitch bowel sounds or absent sounds
 - Blood or mucous present in stool.
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Note - If a PR examination is required follow local unit / Trust policy

Document findings in the patient's health care record

Refer to the flow chart for Bowel Care Management (Appendix 1)

Constipation

Constipation is defined as the difficult passage of hard, dry stool due to impaired peristalsis and or paralysis of the lower gastrointestinal (GI) tract. In general, constipation can be defined as two days without stool (when orally or enterally fed), five days without stool (when receiving only parenteral nutrition or nil intake), or very dry hard stool at any time (Urden et al 2013) (Elliot et al 2012).

Constipation is a common problem in the critical care patient population, and prevention of continuing constipation may help reduce delay in weaning patients from ventilation which can affect length of stay (LoS) and mortality (Mostafa et al 2003)

Contributing factors and causes of constipation

- Spinal cord injury
- Neuromuscular disease, such as amyolateral sclerosis
- Underlying dysmotility
- Abdominal surgery
- Immobility
- Use of opioids or other medications that contribute to hypomotility



- Sepsis
- Electrolyte disturbances
- Insufficient or too much fluid administration
- Inappropriate use of diuretics

(Vincent and Preiser 2015)

Complications of Constipation

- Abdominal pain, distension and discomfort.
- Nausea and vomiting with or without anorexia
- Failure to tolerate enteral feeding with large amount of aspirate leading to malnutrition
- Failure to wean from mechanical ventilation
- Overflow diarrhoea
- Faecal impaction
- Bowel obstruction and paralytic ileus
- Bowel rupture and perforation
- Rectal tear / fissure associated with the development or exacerbation of haemorrhoids
- Psychological factors, such as distress, loss of privacy and embarrassment.

(McPeake et al 2011)

Management of Constipation

Constipation can be reduced by early mobilisation, adequate fluid and fibre intake. Regular stool softeners and laxatives should be used if these actions do not work. Osmotic and stimulant laxatives are considered more effective for bed-bound patients; with the use of suppositories and enemas as part of a bowel management regime. Aperients that may be administered for constipation management have different modes of action, and fall into four main groups:

- Bulking agents
- Lubricant/softeners
- Gut stimulants
- Osmotic agents

Aperients may be contraindicated for the following patients:

- Patients who have had abdominal surgery and where feeding is yet to be established.
- Patients with a bowel obstruction
- Patients with an ileus
- Patients who are on Total Parenteral Nutrition (TPN)
- Patients with existing bowel pathology such as Crohn's disease and ulcerative colitis
- Patients who are unable to tolerate enteral feeding / oral diet
- Note: Patients with raised intracranial pressure must not have a rectal examination or drug therapies administered rectally due to the risk of valsalva manoeuvre and further increases in the intracranial pressure.

Refer to the flow chart for constipation in Appendix 2.

Diarrhoea

Diarrhoea is common in critically ill patients. It is defined as greater than 300ml or 3 liquid bowel motions in a 24 hour period (Urden et al 2013) (Elliot et al 2012).

Diarrhoea can be characterized according to its:

- Onset and duration (acute or chronic) or

- Type (e.g. secretory, osmotic or malabsorptive)

and defined in terms of :

- Stool frequency,
- Consistency,
- Volume or Weight

Contributing factors and causes of Diarrhoea

- Enteral nutrition
- Infective causes such as clostridium difficile
- Altered intestinal function
- Antibiotic therapy
- Sepsis
- Low albumin
- Disease reactivation
- Malabsorption e.g. Pancreatitis / Bariatric surgery

Complications of Diarrhoea

- Dehydration
- Electrolyte imbalance
- Confusion
- Hypotension
- Skin damage
- Death
- Psychological factors, such as distress, loss of privacy and embarrassment.

(Bayon Garcia C , Binks R De Luca E et al 2013)

Management of diarrhoea

- Discuss with dietician possible changes to feed regime to increase the fibre content. Feeding related diarrhoea may rarely require reduction of feeding rate or repositioning of feeding tube.
- Impaction may need to be excluded via PR examination
- Exclude malabsorption conditions
- If clostridium difficile toxin is suspected, stool specimen should be sent.
- Clostridium difficile is a spore forming bacterium that can be found in stool specimens. Following antimicrobial treatment toxin-producing strains of clostridium difficile can multiply and may cause illness. It is a common cause of antibiotic-associated diarrhoea
- Medications should be reviewed by the medical team- magnesium, sorbitol containing medications, anti-emetic/ prokinetic agents, antibiotic therapy all may have diarrhoea as a side effect
- Gut slowing medications (e.g. loperamide, codeine phosphate) may be considered if microbiological causes for diarrhoea have been excluded.
- In some cases probiotic therapy or medications to stop diarrhoea may need to be considered.
- If the patient has large volume of liquid diarrhoea, then you may need to consider the use of a faecal management system to observe fluid balance and assess the need to replace fluid losses

Refer to the flow chart for Bowel Care Management (Appendix 1)

Special Considerations

Patients with established spinal cord lesions

Some patients with established spinal cord lesions are dependent on manual evacuation of faeces as their routine method of bowel care. This method will have been established as part of their ongoing care by their specialist neurological unit. These patients may well be admitted to other NHS acute trusts for reasons not directly related to their existing spinal cord lesion.



Failure to provide manual evacuation can place individuals with spinal cord lesions at risk of developing autonomic dysreflexia, a condition unique to this patient group. Complications of autonomic dysreflexia may include cerebral haemorrhage, seizures or cardiac arrest. For these reasons autonomic dysreflexia is considered a medical emergency.

Please refer to your local spinal guidelines

Accountability

Healthcare professionals:

- are accountable for their own practice and must be aware of their legal and professional responsibilities and work within the code of practice of their professional body.
- must maintain clinical competency as per their competency framework
- must attending relevant training provided by their Trust and put it into practice
- must ensure they are familiar with relevant policies and procedures in their area of practice.
- that carry out bowel care must be trained and assessed as competent to do so.

**Flow Chart for
Bowel Care
Management
(Appendix 1)**

Admission to ACC

Patient Assessment

What are the patient's usual bowel habits?
Does the patient usually take aperients?
What is the regular dietary, fluid and exercise routine?
Are there contraindications to the use of aperients with the patient?
Does the patient's clinical condition warrant their bowels open. e.g. abdominal surgical patients.
Could there be a metabolic or physical cause for their constipation eg. hypocalcaemia, spinal cord compression, tumour infiltration, ileus or obstruction?
Commence & maintain Bristol Stool Chart

Followed by physical assessment each shift thereafter

Expose and observe the abdomen, look for distension
Auscultate for presence of bowel sounds - if present, note pitch
Palpate for tenderness, tightness/rigidity
Document passing flatus, bowels open and quantity/nature of faeces.

No Bowel movement within 24hrs or Bristol Stool Type 1-2

Correct electrolytes
Confirm adequate hydration
Review medication
Consider PR examination with medical team

Bristol Stool Type 3 - 4
Normal Bowel Function
No further action
Reassess next shift

Bristol Stool Type 5-7
Follow unit/trust policy for stool sampling

Consider starting prophylactic aperients, such as Lactulose 10mls BD

Identify causive agent
Check electrolytes
Check hydration /fluid status
Consider increasing fibre content of diet/enteral feed
Review medication for intolerance
Exclude impaction
Exclude malabsorption conditions

No bowel movement after further 24 hrs
Correct electrolytes
Confirm adequate hydration
Review medication
Consider PR examination with medical team
Consider abdominal X-ray

Treat / Control
Consider medication to control diarrhoea
Note : Antidiarrheals such as Loperimide are not recommended for use when a patient has CDI as the endotoxins would be retained in the intestine

Increase laxatives or add second agent, such as Senna

Consider Faecal management System if infection excluded and in accordance with local policy.

No bowel movement after further 24 hrs
Refer to Constipation management flow chart (appendix 2)

Maintain patients' dignity and privacy at all times.

Skin assessment and care is essential after bowel movement.

Consider use of barrier cream to protect skin from Moisture Associated Skin Damage.

Use of appropriate pads to draw moisture away from skin may be appropriate



**Flow Chart for
Constipation
Management
(Appendix 2)**

PR Examination
Are faeces felt?

Yes
Impacted?

No
Refer to Appendix 1

No
Is the stool soft?

Yes
Administer prescribed
lubricant/softener enema, such as
Sodium Citrate enema

Yes
Administer prescribed stimulant
suppositories, such as two 4g glycerin
suppositories.

No
Administer combination of prescribed
softener and stimulant
suppositories, such as one 4g
Glycerine Suppository and one 10mg
Biscodyl Suppository

Bowels Opened
Yes
Refer to appendix 1
No
Administer prescribed
lubricant/softener enema, such as
Sodium Citrate enema

Bowels Opened
Yes
Refer to appendix 1
No
Administer prescribed osmotic
enema, such as Phosphate Enema

Bowels Opened
Yes
Refer to appendix 1
No
Inform medical staff for further
management

References

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