Faecal incontinence is common in ICU. There is little guidance on its management, so a trust drew up its own, with an emphasis on preventing and healing skin damage.

Faecal incontinence in critical illness

In this article...

▷ What to include in a faecal incontinence assessment
▷ How to optimise skin care
▷ The importance of faecal management systems and when they should be used

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Diarrhoea is a common problem in ICUs, occurring in as many as half of patients who are critically ill. There is a lack of specific guidance on the management of faecal incontinence in these patients.

A literature review was used to identify best practice of faecal incontinence in patients in critical care and draw up local guidelines. A specific focus was put on the management of faecal incontinence to protect and heal damaged skin. Nurses are ideally placed to support patients with this condition.

In a best practice statement on identifying criteria for wound infection, the European Wound Management Association highlighted faecal incontinence as a risk factor for contamination to pressure ulcers, which are often sustained around the pelvic region (EWMA, 2005). Faecal matter has high concentrations of bacteria, which can lead to damaged skin if there is prolonged contact.

The National Institute for Health and Clinical Excellence (2007a) has produced guidelines in faecal incontinence, but neither these nor the EWMA address the management of it in patients who are critically ill.

At Royal Liverpool and Broadgreen University Hospitals Trust, there was no standardised evidence-based protocol for managing faecal incontinence within ICU nursing policies and procedure guidelines. A small survey of 13 nursing staff on how they treated faecal incontinence showed a variety of approaches, including incontinence pads, barrier creams and faecal management systems. In discussion with the tissue viability team, it was agreed that the unit would benefit from one guideline to ensure evidence-based practice was carried out by all members of the nursing team.

Background Within the high-tech environment of the modern ICU, bowel care has often been overlooked and can be an afterthought (Dorman, 2004). The primary priority in the ICU is to save lives but if bowel care is ignored it can lead to abdominal distention, vomiting, dehydration, confusion, retention of urine, overflow of faeces, and obstruction and perforation of the bowel (Hill et al, 1998).

The reasons for diarrhoea in patients in ICU include medications, lack of fibre in tube-feeding formulas, physiological factors associated with stress, critical illness itself or disturbances in gut flora caused by antibiotics and antacids (Ferrie, 2007).

Skin damage is also a major problem associated with poor bowel management because the skin has extended contact with excessive moisture resulting from urine or liquid stool incontinence. Faecal incontinence causes more irritation to the perineal skin than urinary incontinence because faeces contain bacteria and digestive enzymes that damage the skin (Johnstone, 2005). Ousey and Gillibrand (2009) stated that excessive skin wetness should be avoided and the natural pH range (4.0-7.0) should be maintained to avoid risks of infection.

Incontinence is a major causative factor in the development of pressure ulcers because a warm, moist environment is present that encourages bacterial growth, which can lead to tissue breakdown, maceration and excoriation (Cooper and Gray, 2001).

Assessment of faecal incontinence Taking a detailed history is an essential part of clinical assessment to find a cause, reach a diagnosis and create an individual treatment plan (Maeda et al, 2007).

Poor nursing assessment of bowel dysfunction can lead to poor management, resulting in further disruption and complications to the patient’s illness (Koch and Hudson, 2000). NICE (2007a) said that an

5 key points

1 Nurses have an important role in the assessment and management of patients with faecal incontinence

2 A holistic assessment is essential to aid choice of management and skin care

3 Evidence-based practice and standardised protocols benefit patient care

4 Faecal incontinence has psycho-emotional and physical effects

5 Nurses should not underestimate the value of supportive interaction with patients

Interaction is valued by patients
assessment should include a history, body mass index, history of the problem, a general and anorectal examination, current medications and dietary intake.

Ness (2008) found that, compared with urinary incontinence, faecal incontinence is often ignored in patient assessments; however, this review did not include patients in critical care. A literature search uncovered little research on the assessment of faecal incontinence in these patients but it is clear that a precise and specific history is essential as one of the first lines of managing faecal incontinence (Rudolph and Galandiuk, 2002; Chelvanayagam and Norton, 1999).

Skin care
Gray et al (2002) stated that overexposure to moisture can cause the skin to become macerated, making it fragile and putting it at risk of bacterial infections. Kemp (1994) found that attempting to prevent the harmful effects of moisture, as well as the negative effects of irritants and bacteria in faeces, can be complex.

Cooper (2002) suggested that to make a clinical decision on the management of faecal incontinence, a full assessment must be done, taking into account the frequency and type of incontinence. It must be noted whether incontinence pads are already in use. A decision should then be made, based on clinical evidence, patient needs, staff needs and cost implications.

Holden (1998) recommended cleansing the skin with warm water, followed by regular use of a barrier cream for protection. In contrast, however, Le Lievre (1996) argued that increased moisture to the skin surface increased the friction coefficient, leading to skin breakdown.

Dealey (1995) and Byers et al (1995) identified benefits with the Triple Care Cleanser and Cream regimen (Smith & Nephew), including lower transepidermal water loss readings and a reduction in patients with erythematous changes, but results were not significant. Ousey and Gil-llibrand (2009) agreed that skin should be cleansed using a mild cleansing agent that minimises irritation and dryness of the skin, with care being taken to minimise the force and friction applied to the skin.

A randomised study by Cooper and Gray (2001) compared the use of soap and water with Clinisan (Vernacare). Skin integrity was recorded by photographs and showed a significant reduction in category 2 pressure ulcers in the Clinisan group as no patients developed breaks to the skin. By comparison, broken skin was present in five patients where soap and water was used.

It is clearly important that every clinician provides a skin care regimen that is evidence based in preventing broken and damaged skin.

Faecal incontinence can lead to painful and uncomfortable excoriation of the skin. Barrier creams are available but the small survey undertaken in our ICU suggested that not all nurses were aware of when or whether to use them.

Cavilon Durable Barrier Cream is a water-in-oil emulsion that offers long-acting protection against bodily fluids while acting as a moisturiser for the skin (Williams, 2001). Incontinence pads can be used with the cream as it does not interfere with their absorbency; it does not require frequent application and only requires a small amount per application, making it more cost-effective than other barrier creams.

Studies of patients with excoriation, maceration and other tissue damage carried out by Campbell et al (2000) and Williams (2001) showed considerable improvement in skin integrity where Cavilon Barrier Cream was applied, with all patients reporting painless application. Grove et al (1993) compared the skin protection of Cavilon No Sting Barrier Film (NSBF) with two alcohol-based products and found it provided significant protection against skin stripping, whereas the alcohol-based products provided none.

However, there are flaws in all the studies discussed above, including short durations and varied levels of incontinence among participants.

Faecal management systems
Barrier creams can provide some skin protection but Beldon (2008) argued that each time a patient is incontinent, the barrier cream must be removed to avoid a build-up of barrier cream mixed with faeces. If a patient is passing large amounts of loose stools throughout the day, the epidermis is likely to be overwhelmed by moisture, digestive enzymes and bacterial load, leading to the development of moisture lesions (Beldon, 2008). This is when a faecal management system (FMS) should be considered.

The Flexi-Seal FMS is used at The Royal Liverpool and Broadgreen University Hospitals Trust. This is a temporary containment device consisting of a soft, flexible silicone catheter with a low-pressure balloon. In studies of three patients carried out by Johnstone (2005), all patients found the device comfortable, skin integrity improved and it was simple to use.

A prospective, non-controlled, descriptive, clinical study on faecal management systems in the ICU was undertaken by Padmanabhan et al (2007) and included 42 patients from seven hospitals in the US. Physicians and nurses reported them simple to use, reports of pain or discomfort were uncommon, and skin condition was improved in over 92% of patients. The researchers concluded that such systems were safe but more trials may help to measure clinical and economic outcomes.

The FMS is reported to help prevent cross-infection, for example where C difficile is present (Rees and Sharpe, 2009). This may mean its use has important cost implications on reducing hospital-related infections (Ferrie, 2007).

Contraindications to FMSs include faecal impaction, recent large bowel surgery and suspected or confirmed rectal mucosa impairment (Rees and Sharpe, 2009); as such, FMSs should always be prescribed by a doctor and a rectal examination undertaken before insertion. Devices should only be inserted by a nurse or doctor who has received training and is deemed competent.

A guide to FMSs is available at tinyurl.com/fms-Wales.

Patient experience
NICE (2007a) recognised that health professionals need to be aware of the physical and emotional impact faecal incontinence
can have on individuals and their carers. It can have a wide range of psycho-emotional and physical effects including anxiety, depression and poor self-image, as well as restrictions on work, social life and relationships.

Psychological and emotional support should be offered and studies have found that patients with good knowledge of faecal incontinence have better outcomes (Norton et al, 2010). The Department of Health (2005) supported this in The National Service Framework for Long-Term Conditions, which identified the need for patients to be involved in, and share control of, treatment and management decisions.

Within the ICU, faecal incontinence is often a result of patients’ critical illness and may resolve once their underlying condition improves. However, patients should still be told the likely cause of diarrhoea and the treatment regimen.

Given the taboo nature of the topic, patients often have difficulty talking about faecal incontinence with healthcare professionals; it is therefore essential that nurses are approachable and empathetic, and maintain patient dignity. Nurses should also provide motivation and empowerment in interventions where the patient needs to follow advice (Butcher, 2004).

Implementing change
How to Change Practice (NICE, 2007b) is aimed at organisations and professionals attempting to implement change. It outlines how to identify and overcome different types of barriers to change.

We used this model to improve recommendations on faecal management in the ICU. The staff survey had found a primary barrier of lack of awareness and knowledge within the nursing team, so a guideline was produced, reviewed by the tissue viability team and disseminated by small teaching sessions.

Discussion
Rather than just being a fact of life in ICU, diarrhoea and faecal incontinence can be managed by the multidisciplinary team. Although there are many causes of faecal incontinence in this setting, the literature suggests management can be improved by accurate assessment and use of a standardised protocol.

Very few systematic reviews or high-quality randomised controlled trials are available on this subject. Evidence for wound care appears to be based more on expert opinion than high-quality scientific research and more studies are needed.

Protecting perianal skin in patients who suffer from acute diarrhoea and faecal incontinence is often a challenge for nurses. The literature suggests using barrier creams for at-risk skin as well as damaged skin is beneficial.

The literature on use of FMSs suggests they will reduce the likelihood of faecal contamination and save patients the discomfort of possibly developing incontinence dermatitis or a moisture lesion, in addition to preventing faecal contamination of a wound.

Conclusion
Faecal incontinence is distressing, unpleasant and frequently socially disruptive to patients. Quality of life can be affected and should be assessed and managed appropriately using support, advice, motivation, empowerment and a good nurse-patient interaction.

References


NICE (2007b) How to Change Practice: Understand, Identify and Overcome Barriers to Change. tinyurl.com/nice-barriers


