

# AN INTRODUCTION TO FAECAL INCONTINENCE

Faecal incontinence is defined as the involuntary loss of solid or liquid stool that has become a social or hygienic problem. It affects over half a million adults in the UK and can have a devastating effect on sufferers. This article examines aetiology, symptoms and treatment and looks at conservative management interventions that should be offered to patients before referral for specialist treatment.

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Faecal incontinence is a stigmatising and under-reported condition often neglected by healthcare workers who feel inappropriately skilled to provide appropriate care for sufferers. Faecal incontinence affects over half a million adults in the UK and can have a devastating effect on sufferers' lives, although it can be difficult to measure the true prevalence due to differing population groups, differences in data collection methods and the stigmatising nature of the problem.

Healthcare workers need to ensure that people who have reported faecal incontinence are offered a focused baseline assessment identifying any contributory factors and that conservative management interventions are explored before referral for specialist treatment.

The recent National Institute for Health and Clinical Excellence

(NICE) guidance, *Faecal Incontinence: The management of faecal incontinence in adults* (NICE, 2007) provides clinicians with guidance on best practice for the management and treatment of faecal incontinence. The evidence and information contained within this article will be based on these recommendations.

## DEFINITION AND PREVALENCE

Faecal incontinence is defined as the involuntary loss of solid or liquid stool that has become a social or hygienic problem (Abrams et al, 2005). Faecal incontinence is usually the symptom of an underlying diagnosis and therefore the cause needs to be identified for each individual.

**'The management of faecal incontinence is a priority in both acute and community care.'**

The management of faecal incontinence is a priority in both acute and community care settings in order to reduce the risk of perineal dermatitis, skin breakdown and transmission

of infection. Studies indicate that chronic faecal incontinence affects between 1–10% of the adult population and that 0.5–1.0% experience regular incontinence affecting their quality of life (NICE, 2007).

In long-term care, faecal incontinence has been estimated to be as high as 29.5% (Sgadari et al, 1997) and is a problem in 17–66% of hospitalised elderly patients (Brown and Sears, 1993). However, true numbers are difficult to determine as many adults will self-care rather than admitting faecal incontinence to a healthcare worker (Johanson and Lafferty, 1996).

With an increasingly elderly population and higher numbers of people moving to institutional care, faecal incontinence is a growing problem.

## CAUSES OF FAECAL INCONTINENCE

Maintaining bowel continence is a complex process involving multiple regulatory mechanisms influencing stool consistency, intestinal motility, rectal vault storage and anal sphincter tone. For some individuals there is a single straightforward

cause, in others there may be an accumulation of factors, for example, an individual with multiple sclerosis may be continent at home where the toilet facilities are appropriate to their needs but incontinent in the outside world where access to facilities may be restricted.

Triggers such as postnatal trauma and chronic straining from constipation may lead to faecal incontinence later in life when other conditions such as diabetes occur. Some common causes of faecal incontinence are summarised in *Table 1*.

As people are often reluctant to disclose symptoms of faecal incontinence, healthcare workers should enquire sensitively about symptoms, particularly in high-risk groups such as (NICE, 2007):

- ▶▶ Frail older people
- ▶▶ People with loose stools or diarrhoea
- ▶▶ Women following childbirth
- ▶▶ People with neurological or spinal disease
- ▶▶ People with severe cognitive impairment
- ▶▶ People with urinary incontinence
- ▶▶ People with pelvic organ prolapse/ rectal prolapse
- ▶▶ People who have had anal surgery or colonic resection
- ▶▶ People who have undergone pelvic radiotherapy
- ▶▶ People with learning disabilities.

## ASSESSMENT

An assessment should include a history of the presenting symptoms and a physical examination. This will focus the

**Table 1**

### Causes of faecal incontinence

Primary problem	Common causes
Anal sphincter or pelvic floor damage	<ul style="list-style-type: none"> <li>• Obstetric trauma</li> <li>• Iatrogenic (haemorrhoidectomy, anal stretch)</li> <li>• Idiopathic degeneration</li> <li>• Direct trauma or injury</li> <li>• Congenital anomaly</li> </ul>
Gut motility/stool consistency	<ul style="list-style-type: none"> <li>• Infection</li> <li>• Inflammatory bowel disease</li> <li>• Irritable bowel syndrome</li> <li>• Pelvic radiation</li> <li>• Diet</li> <li>• Psychological state</li> </ul>
Ano-rectal pathology	<ul style="list-style-type: none"> <li>• Rectal prolapse</li> <li>• Anal or recto-vaginal fistula</li> <li>• Haemorrhoids or skin tags</li> </ul>
Neurological disease	<ul style="list-style-type: none"> <li>• Spinal cord injury</li> <li>• Multiple sclerosis</li> <li>• Spina bifida/sacral agenesis</li> </ul>
Secondary to degenerative neurological disease	<ul style="list-style-type: none"> <li>• Alzheimer's disease</li> </ul>
Impaction with overflow	<ul style="list-style-type: none"> <li>• Institutionalised or immobile elderly people</li> </ul>
Lifestyle and environmental	<ul style="list-style-type: none"> <li>• Poor toilet facilities</li> <li>• Inadequate care/non-available assistance</li> <li>• Drugs with gastrointestinal side-effects</li> <li>• Frailty and dependence</li> </ul>
Idiopathic	<ul style="list-style-type: none"> <li>• Unknown cause</li> </ul>

Reproduced from (Norton and Chelvanayagam, 2004)

need for further investigations and may avoid unnecessary procedures or repetition.

A focused baseline assessment will enable the clinician to initiate a conservative management strategy without formal testing. Individuals should be given the opportunity to express their needs and preferences when planning treatment and care and a focused baseline assessment should include (NICE 2007):

- ▶▶ Relevant medical history
- ▶▶ General physical examination
- ▶▶ Ano-rectal examination
- ▶▶ Cognitive assessment (where appropriate).

It is also important to consider the psychosocial aspects of faecal incontinence, such as coping mechanisms and quality of life. However, the literature provides limited evidence on measuring outcomes or validated tools (NICE, 2007).

When assessing an individual with faecal incontinence it is essential to define the combination of factors that is contributing to the soiling. An assessment checklist can aid in collating baseline information (*Table 2*).

By asking individuals what their most bothersome symptom

**Table 2**

**Assessment of faecal incontinence checklist**

Main bowel complaint? Duration of symptoms/trigger for onset Usual bowel pattern/any recent changes? Bowel habit through adult life	
<p><b>Usual stool consistency</b> (from Bristol Stool Form Scale – see Figure 1)</p> <ol style="list-style-type: none"> <li>1. Lumps</li> <li>2. Lumpy sausage</li> <li>3. Cracked sausage</li> <li>4. Soft smooth sausage</li> <li>5. Soft blobs</li> <li>6. Fluffy, mushy</li> <li>7. Watery, no pieces</li> </ol>	Painful defaecation? Bloating? Sensation of rectal prolapse? Pads used Type? Number used per day? Bowel medication Type? Dose?
<p><b>Faecal Incontinence</b></p> How often? How much? Urge to defaecate felt? Is there urge incontinence: Never/Seldom/Sometimes/Frequently Difficulty wiping: Yes/No/Sometimes Post-defaecation soiling: Yes/No/Sometimes Passive soiling: Yes/No/Sometimes	<p><b>Past medical history</b> (including psychological elements)</p> Able to communicate need to defaecate? Assistance needed for toilet access? Physical or social difficulties with toilet access? Previous bowel treatment and results Obstetric history – difficult deliveries or heavy babies? Fibre content of diet? Smoker? Weight/height/body mass index Fluids, including caffeine Skin problems Bladder problems Effect on lifestyle/relationships Emotional/psychological effect
<p><b>Causative events</b></p> Amount of flatus? Control of flatus: Good/Variable/Poor Ability to distinguish stool/flatus: Yes/No Abdominal pain relieved by defaecation? Any other pain? Rectal bleeding? Mucus? Nocturnal bowel problems?	<p><b>Examination (including digital rectal examination)</b></p> Visual inspection of anus Anal tone Ability to contract anal sphincter voluntarily Presence of stool on rectum Mental state examination if appropriate Ability to manage toileting, include mobility, adjusting clothing, cleansing
<p><b>Evacuation difficulties</b></p> Straining? Sensation of incomplete evacuation? Need to digitate anally, vaginally or to support the perineum?	

Adapted from Norton and Barrett (2002)

- of diarrhoea (e.g. infective, inflammatory bowel disease)
- ▶▶ Warning signs for lower gastrointestinal cancer
- ▶▶ Rectal prolapse or third-degree haemorrhoids
- ▶▶ Acute sphincter injury, including through obstetrics
- ▶▶ Acute disc prolapse/cauda equina syndrome.

**QUESTIONS TO ASK PATIENTS REGARDING THEIR SYMPTOMS**

**What is your bowel motion (stool) consistency like?**

Bowel function varies in the general population from between 1–3 times a day to once every three days (Connell et al, 1965), with most people having irregular bowel habits. Although there is no age-related decrease in bowel movements within the older population there is an increase in self-reported constipation and laxative use (Harari et al, 1996).

A recent unexplained change in bowel habit should be investigated as it may indicate underlying disease or malignancy. Abdominal pain associated with altered bowel habit and bloating may indicate inflammatory bowel disease and should be referred for further investigation.

Fresh blood in the stool may indicate haemorrhoids or anal fissure, however, darker blood may signify underlying disease or malignancy and again should be referred for investigation. Refer to the Department of Health (DoH) referral guidelines for suspected cancer ([http://www.dh.gov.uk/en/Healthcare/NationalServiceFrame works/Cancer/DH\\_4066665](http://www.dh.gov.uk/en/Healthcare/NationalServiceFrame works/Cancer/DH_4066665)).

is, the healthcare worker can prioritise care.

Many people try to cope on their own for years before accessing professional help (Johanson and Lafferty, 1996) and it is useful to explore whether there is a causative event, such as traumatic

childbirth, that they have not realised is relevant.

Individuals with the following conditions should have these addressed before commencing initial conservative management (NICE, 2007):

- ▶▶ Faecal loading
- ▶▶ Potential irritable causes

Asking patients to complete a one-week bowel diary can provide a baseline measurement of current bowel function. The diary should include information on stool consistency using a scale such as the Bristol Stool Form Scale (Figure 1), as this helps patients to provide a more accurate record. Loose stool increases the risk of incontinence, whereas pellet-like stool may indicate slow colonic transit time and constipation.

Many people are reluctant to admit to faecal incontinence and will restrict their lifestyle to limit episodes making it appear less severe. It may also be difficult for them to estimate the quantity of incontinence (i.e. smearing/ minor stain, teaspoonful, tablespoonful, whole bowel motion) (Norton and Chelvanayagam, 2004). Therefore, it may be more helpful to separate the two main symptoms of urge and passive incontinence.

#### When you have an urge to open your bowels do you need to rush to reach the toilet?

As the rectum fills the internal anal sphincter relaxes and the rectal contents are 'sampled' by the sensitive nerve endings in the upper anal canal. Where bowel control is normal, the urge to defecate can be deferred by voluntary contraction of the external anal sphincter muscle.

If the urge is successfully resisted, the feeling reduces enabling the individual to defaecate at a more convenient time.

However, if the external sphincter does not function properly, the

anal squeeze will be insufficient to suppress the urge to defaecate even if the stool is a normal consistency.

Weakness or damage to the external anal sphincter leads to an inability to oppose rectal contractions, which can result in urge incontinence. A common cause of damage of external sphincter weakness is obstetric trauma (Sultan et al, 1994).

Urgency can cause anxiety and panic and lead to individuals restricting their social activities in order to avoid incontinence. It is important to understand how often urge incontinence actually occurs and whether social restrictions are due to real episodes or fear of incontinence.

#### Are you unaware of passive leaking from your bowel? Is the bowel motion formed or liquid? Can this occur at any time or only after you have had a bowel motion?

Weakness or damage to the internal anal sphincter results in loss of resting anal tone and the patient will be unable to completely close the anal canal. If the stool is loose or soft, some of it can remain in the anal canal and ooze out following defaecation.

Damage to the internal anal sphincter can result from surgery, such as haemorrhoidectomy, or from idiopathic degeneration of the muscle (Vaizey et al, 1997). Individuals report difficulty cleaning the anus after defaecation and consequent soiling or passive soiling, which can be exacerbated by physical exercise. This can also result from rectal prolapse.

### The Bristol Stool Form Scale








Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces <b>Entirely liquid</b>

Figure 1: The Bristol Stool Form Scale can help patients and healthcare workers alike assess the shape and consistency of the stool.

#### Can you distinguish between wind and a need to empty your bowels? Can you control the wind?

If the sensory nerves responsible for 'sampling' become damaged, patients may report incontinence of liquid or even solid stool on passing wind as they are unable to differentiate between flatus and stool.

### MANAGEMENT AND TREATMENT

Patients should be provided with information suited to their individual needs, which enables them to make informed decisions and choices about their care and treatment. Where an individual is felt to lack the mental capacity to make decisions healthcare workers should follow the DoH guidelines (*Reference Guide to Consent for Examination and Treatment* [DoH, 2001]) and the code of practice accompanying the Mental Capacity Act (<http://www.justice.gov.uk/guidance/mca-code-of-practice.htm>).

The initial management of faecal incontinence should concentrate on achieving an ideal stool consistency and successful bowel emptying at predictable times.

### Bowel habit

Healthcare workers should encourage patients to achieve a regular bowel habit. This includes:

- ▶▶ Encourage bowel emptying after meals – utilising the gastro-colic response
- ▶▶ Ensure toilet facilities are private and appropriate to the patient's needs
- ▶▶ Introduce techniques to facilitate bowel evacuation, such as biofeedback and exercises (Horton, 2004).

### Diet and fluid intake

Certain foods affect bowel function and stool consistency. Eating triggers the gastro-colic response and consequently the urge to go to the toilet. Certain foods, such as rhubarb and figs, contain natural laxatives. Artificial

sweeteners contained in many 'sugar free' drinks and foods have laxative properties.

A food/fluid intake diary should make it possible to highlight any trigger foods that may be aggravating urgency or faecal incontinence. Although there is a paucity of evidence to support specific dietary and fluid modifications, the recent NICE guidelines (NICE, 2007) recommend a diet that promotes ideal stool consistency and bowel emptying (see appendix K).

### Medication

A number of drugs can contribute to faecal incontinence and alternatives should be considered when reviewing patients' medication. A list of drugs can be found within the NICE guidelines (NICE, 2007) (appendix J).

Where faecal incontinence is associated with loose stool, anti-diarrhoeal medication

should be offered. The anti-diarrhoeal of choice is loperamide hydrochloride (NICE, 2007). However, patients unable to tolerate loperamide hydrochloride can be offered codeine phosphate or co-phenotrope as an alternative. Loperamide hydrochloride should be introduced in low doses initially so that the dose can be later adjusted to suit patients' bowel frequency and lifestyle.

The principle action of loperamide hydrochloride is to increase gut transit time. This increases the amount of water absorbed from the stool and produces a firmer stool consistency (Sun et al, 1997).

Loperamide hydrochloride also reduces rectal contractions and internal anal sphincter relaxation associated with rectal distension. Low doses of loperamide hydrochloride can be effective in reducing incontinence even when stool consistency is normal.

### Lifestyle

Healthcare workers should provide information and advice to enable individuals to continue a normal work and social life, which may include:

- ▶▶ Contingence products (supply and choice)
- ▶▶ Planning improved toilet access
- ▶▶ Information on where to access emotional and psychological support
- ▶▶ Skin care advice covering cleansing and barrier products
- ▶▶ Advice on odour control and laundry needs.



Figure 2: Some of the anal plugs available.

## Anal plugs

Anal plugs provide an alternative to pads and can occlude the leakage of faeces from the bowel (Figure 2). However, many individuals cannot tolerate anal plugs due to discomfort in the anal canal. The anal plug can be left in place for up to 12 hours and is removed by pulling the attached string.

## Pelvic floor and anal sphincter exercises

Pelvic floor and anal sphincter exercises are often recommended for faecal incontinence. These aim to increase the strength and endurance of the sphincter and may help the patient to resist the urge to defaecate. Exercises can be used in combination with other therapies, such as medication and toilet training.

Recommendations for people who continue to have episodes of faecal incontinence following initial management are that they should be offered specialist management from a specialist continence service, including (NICE, 2007):

- ▶▶ Pelvic floor muscle training
- ▶▶ Bowel retraining
- ▶▶ Biofeedback
- ▶▶ Electrical stimulation.

## CONCLUSION

Faecal incontinence is often neglected by healthcare workers, leading to patients being managed by gastroenterologists or even colorectal surgeons.

Healthcare workers across all disciplines need to be able to assess and offer advice to individuals with faecal incontinence.

This article aims to raise awareness of this distressing problem among healthcare workers as well as highlighting some effective management strategies. **CE**

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## Key Points

- ▶▶ Faecal incontinence is defined as the involuntary loss of solid or liquid stool that has become a social or hygienic problem.
- ▶▶ Faecal incontinence is an under-reported condition.
- ▶▶ It is often neglected by healthcare workers who feel inappropriately skilled to provide appropriate care.
- ▶▶ Faecal incontinence effects over half a million adults in the UK.

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