

Faecal incontinence

Faecal incontinence is common in older adults. It remains largely a hidden problem and is socially disabling. It tends to have multiple contributory factors for any individual patient. Many people can be helped substantially by simple and inexpensive treatment options. In this article, we discuss the main features of faecal incontinence in older adults, the causes and the general management options.

Dr FO Ijaola Specialist Registrar in Geriatric Medicine, City Hospital, Dudley Road, Birmingham B18 7QH

***email** foijaola@yahoo.com

Faecal incontinence is a potentially disabling condition in the older adult. Patients are often reluctant to seek help from healthcare professionals because of embarrassment and perceived lack of effective treatment.

It has a considerable impact on the lifestyle and quality of life of those affected and can cause profound distress to both sufferers and their carers.

Background

Faecal incontinence is the involuntary loss of liquid or solid stool that is perceived as a social or hygiene problem.¹ Incontinence is considered to be minor when the patient is unable to control the passage of flatus or loose stool leading to soiling of the undergarments. Major incontinence is characterised by regular inability to control stool of any consistency.

Faecal incontinence tends to be under-reported, underdiagnosed and undertreated. It has a prevalence rate of 1–4% in the general population.² The incidence is higher in women, older adults and nursing home residents.^{3,4,5} The prevalence may be up to 25% in care home patients.² There is a strong association between faecal and

urinary incontinence, both often co-existing in the same patient.³ Faecal incontinence is associated with increased mortality in older adults in long-term care homes; in one study, 10-month mortality was 26% compared with 6.7% in continent residents.⁶ A similar survival disadvantage is seen in patients with faecal incontinence admitted to acute elderly care wards; one study showed a 43% mortality rate at 3-month review, compared with 16% in continent patients.⁷

It is estimated that incontinence in adults (both urinary and faecal) accounts for 2% of the total annual healthcare budget in the UK. The annual NHS bill for treating and managing incontinent persons is estimated at £500 million. Annual costs of continence care for older people include £22 million for drugs, £58 million for appliances, such as anal plugs and faecal collectors, and £27 million for containment products, such as absorbent pads and pants.⁸ The importance of incontinence in older people was highlighted by the Department of Health in the National Service Framework for Older People.⁹ It introduced a healthcare programme promoting high quality medical

care in specific clinical areas, one of which is continence. The aim was to improve accessibility to high quality continence services.^{10,11} Furthermore, NICE has issued guidelines on the management of faecal incontinence in adults for use in the NHS in England and Wales.⁸ Despite the above work in this area, a recent UK audit¹², which examined the quality of care for older people with urinary and faecal incontinence in primary care, secondary care and care homes in England, Wales and Northern Ireland, highlighted current inadequacies. Basic assessment and care by the professionals directly looking after older people are often lacking. Opportunities to assess, treat and reduce the numbers of incontinent people are being missed. It concluded that the fundamentals of continence care urgently need to be re-established into the daily practice of medical and nursing staff.

Aetiology

Minor incontinence is often due to surgical or accidental injury to the anal sphincter or may follow chronic constipation with overflow. Major incontinence, however, is

usually due to more serious surgical trauma involving the anal sphincter or the pelvic floor, or neuropathic lesions within these structures. The most common cause of faecal incontinence in all age groups is degeneration of the smooth muscles of the internal anal sphincter (Table 1). Anal sphincter damage can occur following surgery for treatment of anal fissures, or secondary to manual anal dilatation for treatment of chronic fissure or constipation.¹³

In older adults, many factors contribute to impairments in faecal continence. Constipation or faecal impaction remain a common cause.¹⁴ These may occur as a result of a diet low in fibre with or without inadequate fluid intake. Other contributing factors include medications, especially opioid analgesics and laxative abuse; poor mobility; and other co-morbidities. Faecal incontinence is a common feature of neurological diseases such as stroke, multiple sclerosis and dementia (whether due to Alzheimer's disease, Parkinson's disease or vascular dementia). It occurs if the patient is unable to sense rectal distension or ignores the urge to defaecate, leading to faecal impaction and intermittent leakage. Inflammatory bowel diseases, connective tissue disorders and diabetes mellitus are also recognised causes of the problem. Other causes of faecal incontinence include rectal prolapse, anorectal or vaginal fistula, and other disorders of the lower bowel such as anal fissure, haemorrhoids and neoplasm.

Social impact

Faecal incontinence profoundly affects the quality of life, psychological state and lifestyle

Table 1: Causes of faecal incontinence

Anal sphincter damage, weakness or degeneration	Obstetric trauma: instrumental delivery, large baby Post surgery: anal stretching, haemorrhoidectomy Direct trauma Radiotherapy for cervical or pelvic neoplasm
Neurological factors	Parkinson's disease Multiple sclerosis Dementia Stroke Diabetic autonomic neuropathy
Faecal impaction with overflow	Low fibre diet Poor fluid intake Immobility Medications: opioids, codeine phosphate
Anorectal pathology	Rectal prolapse Anal fissure or fistula Cancer
Diarrhoea and intestinal injury	Ulcerative colitis Crohn's disease Irritable bowel syndrome
Environmental factor	Access to toilet facilities Ability to reach toilet in time

of the affected individual. It is associated with increasing disability,³ thus causing severe social restriction, and may result in unwanted or premature admission to a care home.

Faecal incontinence can cause anxiety and depression in affected patients.^{3,15} It also has an impact on the family and carers of affected patients, potentially accounting for a change or reversal in role, decreased intimacy, social isolation and the breakdown of a relationship.¹⁶

Management

Optimum management of faecal incontinence can be guaranteed by prior firm aetiological diagnosis,

elucidating all contributory factors. Detailed history and adequate physical examination, including digital rectal examination, are essential.

Evaluation of the cause of faecal incontinence should be systematic and thorough. The history should take into account dietary and fluid intake, underlying medical conditions, previous surgical history, medications, mobility and exercise.

Physical examination should exclude conditions like dehydration, hypothyroidism, other systemic diseases, and local rectal and anal signs. More specialised assessments such as anal manometry may also be required. Anal manometry measures the pressure generated by the anal sphincter muscles using a balloon-tipped probe. However, this is rarely

necessary in older adults.

Other clinical and laboratory investigations for faecal incontinence may include flexible sigmoidoscopy; defaecating video proctography, which reveals the movement of barium paste instilled into the rectum; anorectal ultrasound; and magnetic resonance imaging that accesses the rectum and anal sphincter muscle.

Further tests that may be considered include anal electromyography; the pudendal nerve latency test; and measurement of stool electrolytes, osmolality and fat, which help differentiate secretory and osmotic diarrhoea. The pudendal nerve latency test is an electrophysiological test that measures the integrity of the pudendal nerve, which supplies the motor innervation to the rectal muscles.

Treatment

Treating incontinence requires a systematic approach. Interventions may include any or all of the following measures: psychological support, behavioural techniques, topical applications, drug therapy, containment products and surgery. The least invasive and safest treatment option should be instituted first. The specific therapy in an individual is based on the aetiology and severity of their incontinence.

Patients should be given advice on simple measures such as increasing intake of fluids and dietary fibre. Medication review and avoiding those that can contribute to faecal incontinence is useful. Regular toilet visits and bowel retraining may be helpful. Equally important is having easy access to and improving the quality of toilet facilities, and

putting in place measures to improve the patient's mobility.

Behavioural techniques, such as biofeedback, help in about two thirds of patients.¹⁷ Biofeedback is a complex package that enables patients to learn how to change their involuntary physiological body functions. Patients are taught to recognise rectal distension – the early sign that they need to defaecate – at progressively lower thresholds. Anal pressure is measured using anal manometry; and trained biofeedback specialists, such as specialist nurses and physiotherapists, teach the patient anal sphincter exercises for a tailored exercise regime. Biofeedback specialists also provide dietary advice, advice on resisting urgency and counselling to help patients improve their body function.

Medicines

In terms of drug therapy, it can help to use bulking agents, such as starch, psyllium husk, methylcellulose, pectin, and gum arabic, to solidify stool and enhance sphincter function. Loperamide helps if diarrhoea is a contributing factor. It diminishes the force of bowel contraction and enhances absorption of colonic water, thereby thickening the stool consistency. If overflow incontinence is a contributing factor, laxatives and enemas may be required initially. These are usually followed by other treatment options to maintain continence.

Anal fissure can be treated with topical application of glyceryl trinitrate (GTN) or diltiazem ointment to the perianal skin.^{18,19} These ointments are effective at reducing anal sphincter tone, thus allowing the fissure to heal. Topical GTN is associated with headache in two-thirds of patients, which has limited its use. The two treatments,

taken together, have radically altered the management of anal fissure, and they often now obviate the need for surgical intervention.

Further care

Surgery is required in only a small number of patients. It is reserved for patients with major incontinence that has failed to respond to conservative management. Procedures such as repair of major structural sphincter damage have produced good short-term results but less satisfactory long-term results.²⁰ Other procedures include implantation of an artificial bowel sphincter—a circular cuff instilled around the anal canal. The cuff can be inflated to maintain anal sphincter closure and deflated to effect bowel evacuation, with about 50% success.²¹ Sacral nerve stimulation, which relies on a programmable stimulator that is implanted through the sacral foramen where it triggers contraction of rectal and sphincter muscles, has proven success at improving symptoms.²² A minute number of patients require colostomy to help maintain continence.

Containment

When active treatment of faecal incontinence is not feasible or practicable, containment may be the best option. The wide range of faecal incontinence products now available include absorbent products such as washable, reusable or disposable pads and pants. Furniture and bedding protectors, and waterproof mattresses that help to keep surfaces dry. Various wipes, skin care and odour control products are available. Anal plugs may be used as a short-term measure.

Privacy and confidentiality are of considerable importance in the management of incontinence. These,

and the dignity of elderly patients on hospital wards, should be maintained at all times to minimise emotional stress. For any treatment scheme to achieve the desired goal, its impact on patients' lifestyle, psychological state and social function must be taken into account.

Further help and confidential advice can be obtained from support groups such as Continence Foundation and Incontact.^{23,24}

Conclusion

Faecal incontinence is a common and under-reported problem, with many older patients too embarrassed to present for care. Optimal management relies on a thorough diagnosis that identifies all contributory factors, and a systematic approach to treatment. Management options include drug therapy, topical applications, containment products, behavioural techniques and surgery.

Faecal incontinence has considerable impact on patients' lifestyle and quality of life, and can cause profound distress to both sufferers and their carers. Privacy and confidentiality should be maintained at all times.

I have no conflict of interest

References

1. Incontinence: causes, management and provision of services. Report of a working party. Royal College of Physicians. 1995
2. Peet S M, Castleden S M, Mc Grother C W. Prevalence of urinary and faecal incontinence in hospitals and residential and nursing homes for older people. *Br Med J* 1995; 311:1063–1066
3. Edwards N I. The prevalence of faecal incontinence in older people living at home. *Age and Ageing* 2001; 30(6): 503

Key points

- Faecal incontinence occurs in 1–4% of the general population
- It impacts on quality of life and lifestyle of sufferers and carers
- Multiple factors may contribute in any one individual
- Detailed history, assessment and digital rectal examination are essential
- Containment may be the best option when active treatment is not feasible or practical
- Simple and inexpensive treatment options available
- Surgical intervention required only in few patients

– 507

4. Nelson R, Furner S, Jesudason V. Faecal incontinence in Wisconsin nursing homes: prevalence and associations. *Dis Colon Rectum* 1998; 41: 1226–1229
5. Campbell A J, Reinhen J. Incontinence in the elderly: prevalence and prognosis. *Age and Ageing* 1985; 14: 65–70
6. Chassagne P, Landrin I, Neveu C et al. Faecal incontinence in the institutionalised elderly: incidence, risk factors and prognosis. *Am J Med* 1999; 106: 185
7. Akpan A, Gosney MA, Barrett JA. Faecal incontinence and mortality on acute elderly care wards. *Age and Ageing* 2005; 34: 26
8. National Institute of Clinical Excellence (Work UK). Guidelines on faecal incontinence: <http://www.nice.org.uk>
9. Department of Health. National Service Framework for older people. London: Department of Health, 2002.
10. Department of Health. Good practice in continence services. London: Department of Health, 2000.
11. Department of Health. Essence of care. London: Department of Health, 2001.
12. Main S, Wagg A, Potter J et al. National audit of continence care for older people: resources and method. *J E Clin Pract* 2005; 11: 525–532
13. Vaizey C J, Kamm M A, Bartram C I. Primary degeneration of the internal anal sphincter as a cause of passive faecal incontinence. *Lancet* 1997; 349: 612–615
14. Potter J, Norton C, Cottenden A. Bowel care in older people. Research and practice. Royal College of Physicians. London, 2002
15. Verhagen T E. Faecal incontinence in community – dwelling elderly: findings from a study of prevalence, consultation of physicians, psychosocial aspects and treatment. *Ned Tijdschr Geneesk.* 2001; 145(15): 741–44
16. Cassells C, Watt E. The impact of incontinence on older spousal caregivers. *Journal of Advanced Nursing* 2003; 42: 607–616
17. Norton C, Kamm M. Anal sphincter biofeedback and pelvic floor exercises for faecal incontinence in adults – a systematic review. *Aliment Pharmacol Ther* 2001; 15: 1147–1154
18. Lund J N, Scholefield J H. A randomised, prospective, doubleblind, placebo-controlled trial of glyceryl trinitrate ointment in treatment of anal fissure. *Lancet* 1997; 349: 11–14
19. Carapeti E A, Kamm M A, Phillips R K. Topical diltiazem and bethanechol decrease anal sphincter pressure and heal anal fissures without side effects. *Dis Colon Rectum* 2000; 43: 1359–1362
20. Malouf AJ, Norton CS, Engel AJ et al. Long term results of overlapping anterior anal repair for obstetric trauma. *Lancet* 2000; 355: 260–265
21. Vaizey CJ, Kamm MA, Gold DM Eet al. Clinical, physiological, and radiological study of a new purposedesigned artificial bowel sphincter. *Lancet* 1998; 352: 105–109
22. Malouf AJ, Vaizey CJ, Nicholls RJ, Kamm MA. Permanent sacral nerve stimulation for faecal incontinence. *Ann Surg* 2000; 232: 143148
23. <http://www.continence-foundation.org.uk>
24. <http://www.incontact.org>