NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

SCOPE

1 Guideline title

Constipation: management of idiopathic constipation in children in primary and secondary care

1.1 Short title

Constipation in children

2 Background

a) The National Institute for Health and Clinical Excellence ('NICE' or 'the Institute') has commissioned the National Collaborating Centre for Women's and Children's Health to develop a clinical guideline on management of constipation in children for use in the NHS in England and Wales. This follows referral of the topic by the Department of Health (see appendix). The guideline will provide recommendations for good practice that are based on the best available evidence of clinical and cost effectiveness.

b) The Institute's clinical guidelines support the implementation of National Service Frameworks (NSFs) in those aspects of care for which a Framework has been published. The statements in each NSF reflect the evidence that was used at the time the Framework was prepared. The clinical guidelines and technology appraisal guidance published by the Institute after an NSF has been issued have the effect of updating the Framework.

c) NICE clinical guidelines support the role of healthcare professionals in providing care in partnership with patients, taking account of their individual needs and preferences, and ensuring that patients (and their carers and families, where appropriate) can make informed decisions about their care and treatment.

3 Clinical need for the guideline

a) Constipation is a condition characterised by infrequent or painful passage of hard stools (also known as motions, faeces or 'poo'). There are several ways of characterising constipation, which try to quantify the timing and passage of stools and qualify the type of stool. The 'normal' number and type of bowel movements, or defecation, is dependant on the age of the child and can vary from small motions of soft, liquid stools four times a day in newborns to one motion of large, formed stool on alternate days in older children.

b) Constipation is a common problem and can be a source of considerable anxiety to parents and children. In the UK 5% of children between the ages of 4 and 11 years suffer from constipation lasting more than 6 months. Chronic constipation generally develops between the ages of 1 and 4 years, and the pattern of bowel movement tends to be established by the age of 4, although constipation may continue beyond puberty in as many as a third of children.

c) Mild constipation is short lasting and usually clears up easily with dietary modifications but it is not always easily recognised or treated appropriately. This may lead to the development of chronic (longstanding) and more serious constipation. Parents are frequently worried because of the possibility of serious underlying disease. and the impact of the condition on the family may be considerable, causing distress, disruption and frustration. Families may delay seeking help because they feel that the condition will not be taken seriously.

d) Constipation that is not recognised or treated effectively may result in faecal impaction; faecal retention caused by tears in the wall of the anus, known as fissures, with consequent bleeding and worsening pain on defecation; incontinence of faeces and urine,

vomiting, abdominal pain; depression, social withdrawal and school related problems; effects on nutrition and growth and other physical and psychological effects; and continued constipation persisting into adulthood

e) Constipation has been variably defined across all age groups as a delay or difficulty in defecation that persists for 2 weeks or more. There are more objective definitions based on consensus including the previously developed PACCT (Paris Consensus on Childhood Constipation Terminology) and the more recent Rome III criteria. PACCT defined childhood constipation as the occurrence of two or more of the following six criteria in the previous 8 weeks: frequency of movements less than three a week; more than one episode of faecal incontinence a week; large stools in the rectum or palpable on abdominal examination; passing of stools so large that they may obstruct the toilet; retentive posturing and withholding behaviour; painful defecation.

f) The ROME III criteria defined functional constipation as a combination of any of two or more of the following symptoms present at least once a week for more than 2 months in children older than 4 years: two or fewer defecations in the toilet per week, at least one episode of faecal incontinence per week, history of retentive posturing or excessive volitional stool retention, history of painful or hard bowel movements, presence of large faecal mass in the rectum and history of large diameter stools that may obstruct the toilet.

g) Most children with constipation have no underlying pathological condition and are described as having idiopathic or functional constipation. It most commonly stems from a combination of painful defecation associated with voluntary withholding of bowel movement. Many factors can have an influence on painful defecation including the fact that the child is too busy with play and other activities and does not pay attention to the need for bowel

movement; toilet training; changes in diet or dietary habits such as eating less fruit or drinking less water; unavailability of toilets; intercurrent illness and stressful situations. In a few cases constipation may be the result of a serious underlying disorder such as Hirschsprung's disease; this is a condition characterised by neurological abnormalities in the wall of the gut, which requires surgical treatment. If a child has had a 'normal' bowel habit prior to the onset of their constipation, a diagnosis of Hirschprung's disease is highly unlikely. Many children have repeated (and unnecessary) biopsies to exclude Hirschprung's.

h) The majority of children with constipation are seen by their own doctors in primary care. A health visitor may be the first point of contact for families whose newborn and preschool children have constipation, and for older children the emergency department may serve as the first port of call for concerned parents. Constipation may be a complex condition to manage and children who do not respond to initial treatment, or for whom there are concerns regarding underlying disorders, may need referral to specialist services.

i) There are no evidence based guidelines to address the management of this common problem in England and Wales. It is important to differentiate between children with functional constipation (the vast majority) and those with organic disease, so that they all receive appropriate diagnosis and management.

4 The guideline

a) The guideline development process is described in detail in two publications that are available from the NICE website (see 'Further information'). 'The guideline development process: an overview for stakeholders, the public and the NHS' describes how organisations can become involved in the development of a guideline. 'The

guidelines manual' provides advice on the technical aspects of guideline development.

b) This document is the scope. It defines exactly what this guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health (see appendix).

c) The areas that will be addressed by the guideline are described in the following sections.

4.1 Population

4.1.1 Groups that will be covered

Newborns, infants and children up to their 16th birthday, presenting to any healthcare professional in the primary or secondary care, who are suffering with constipation.

4.1.2 Groups that will not be covered

a) Newborns, infants and children with any known congenital, structural abnormality affecting their bowels (gastrointestinal system).

b) Newborns, infants and children with any known underlying metabolic or endocrine disorder that affects bowel motility.

c) Newborns, infants and children with any known neurological condition, including disorders affecting the spine and brain, that can affect bowel movement.

d) Newborns, infants and children with underlying connective tissue disorders.

e) Newborns, infants and children with genetic abnormalities.

4.2 Healthcare setting

The guideline will cover management in the primary and secondary care settings.

4.3 Clinical management

a) Recognition and diagnosis of idiopathic constipation.

b) History including:

- age and sex
- age of onset of symptoms, progression of episodic symptoms
- previous episodes of constipation and response to treatment
- frequency and consistency of stools, faecal soiling, incontinence, painless posturing and any other behaviour suggestive of withholding
- birth history including gestational age and passage of meconium
- family history of constipation and other disorders of the gastrointestinal tract.
- any previous acute illness and hospitalisation
- toilet training, including age of starting
- level of physical activity and playing, and inattention to bowel movement
- dietary history including method of feeding (breast or bottle); weaning patterns; current intake of fruit, fibre, milk, water; changes in appetite,
- any medicines the child is taking
- cultural considerations
- weight and growth
- nausea and vomiting
- urinary symptoms (see 'Urinary tract infection in children: diagnosis, treatment and long-term management' NICE clinical guideline 54)
- developmental history and achievement of milestones

- psychosocial history including behavioural abnormalities, interaction with family and peers including at nursery/school, nursery/school toilet facilities, school attendance record, any psychosocial changes affecting the family.

c) Physical examination including:

- the abdomen
- perineum, perianal area, anus and rectum (including digital rectal examination for presence and consistency of stool, anal tone, anal fissures, skin tags and sentinel piles)
- back and spine
- peripheral nervous system.

d) Diagnostic studies to investigate constipation.

e) Blood tests including:

- full blood count, urea and electrolytes
- thyroid function tests
- tissue transglutaminase antibodies.

f) Radiological investigations including:

- abdominal X-rays
- barium enema
- intestinal transit time
- magnetic resonance imaging.

g) Manometry and rectal biopsy.

h) Management of idiopathic constipation, including:

- the education of children and parents, healthcare professionals and educators in recognition and appropriate treatment.

- the role of midwives, health visitors and other healthcare professionals in encouraging vigilance and recognising potential 'triggers' of constipation
- dietary modification including role of water and milk intake, fruits, vegetables (fibres and roughage), fruit juices, cereals, exclusion of cow's milk protein
- behavioural and psychological approaches, including toilet training, behavioural modification, maintaining toilet diaries, rewarding and psychosocial counselling (including biofeedback therapy and intense psychotherapy)
- pharmacological interventions – disimpaction using oral (laxatives, mineral oils, electrolyte solution) and rectal medicines (enemas, suppositories); analgesia for abdominal pain, including antispasmodics and opiates
- surgical management, including manual evacuation under anaesthetic.

Note that guideline recommendations will normally fall within licensed indications; exceptionally, and only if clearly supported by evidence, use outside a licensed indication may be recommended. The guideline will assume that prescribers will use a drug's summary of product characteristics to inform their decisions for individual patients.

i) Indications for referral to secondary care:

- timing of referral to secondary care
- paediatric gastroenterology referral.

j) The role of information leaflets, web based information and support groups that may be available to help children, parents and carers.

k) The Guideline Development Group will consider making recommendations on the principal complementary and alternative

interventions or approaches to care relevant to childhood constipation, including:

- aromatherapy
- homeopathy
- reflexology
- massage (baby and abdominal)
- acupuncture.

l) The Guideline Development Group will take reasonable steps to identify ineffective interventions and approaches to care. If robust and credible recommendations for re-positioning the intervention for optimal use, or changing the approach to care to make more efficient use of resources can be made, they will be clearly stated. If the resources released are substantial, consideration will be given to listing such recommendations in the 'Key priorities for implementation' section of the guideline.

4.4 Status

4.4.1 Scope

This is the consultation draft of the scope. The consultation period is 30 January 2008 to 26 February 2008.

The guideline will refer to 'Urinary tract infection in children: diagnosis, treatment and long-term management' NICE clinical guideline 54 (2007). Available from www.nice.org.uk/CG054

4.4.2 Guideline

The development of the guideline recommendations will begin in April 2008.

5 Further information

Information on the guideline development process is provided in:

- ‘The guideline development process: an overview for stakeholders, the public and the NHS’
- ‘The guidelines manual’.

These booklets are available as PDF files from the NICE website (www.nice.org.uk/guidelinesmanual). Information on the progress of the guideline will also be available from the website.

Appendix: Referral from the Department of Health

The Department of Health asked NICE:

‘To prepare a clinical guideline on the diagnosis and treatment of idiopathic childhood constipation.’