

THE MANAGEMENT OF FAECAL INCONTINENCE IN CHILDHOOD

Faecal incontinence in childhood results in significant psychological problems, including behavioural and emotional difficulties, bullying and antisocial activity (Joinson et al, 2006). As a result, it is important that any soiling problems are identified as early as possible. This article examines the common causes of childhood faecal incontinence and outlines the optimum management techniques.

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Faecal incontinence (soiling) in childhood results in significant psychological difficulties, including behavioural and emotional problems, bullying and antisocial activity (Joinson et al, 2006). As a result it is important that any soiling problems are identified as early as possible.

There are a number of reasons why a child may develop faecal incontinence and to ensure correct treatment it is important to identify the underlying cause. This article examines the common causes of childhood faecal incontinence.

DELAYED ACQUISITION OF BOWEL CONTROL

In younger children, particularly boys, a refusal or unwillingness to use the toilet/potty to empty the bowels is not uncommon. Parents often report that the child will happily use the toilet/potty to pass urine but flatly refuse to pass stools. Many children demand

a nappy to open their bowels and if this is denied, tantrums can ensue and in some cases children simply open their bowels in their underwear. Continual 'holding on' may ultimately lead to constipation with all its associated problems.

As the risk of constipation in this group of children is quite high, it is important that the problem is addressed as soon as possible. Any underlying issues, such as fear of the toilet or pain experienced when the bowels are opened, obviously need to be addressed first.

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However, in the majority of children there is no underlying issue and the problem is solely related to the child's wish not to use the toilet. From the child's point of view, it is obviously more convenient to defecate in a nappy as this allows him or her to continue playing without the inconvenience of having to go to the toilet.

Parents need to be reassured that this is usually a phase that many toddlers go through, like giving up a dummy, and provided the problem is tackled appropriately it should be relatively short-lived. However, if a conflict does develop between the child and the parents over using the toilet, then the child is at risk of developing constipation as he or she will determinedly hold on to their faeces. The child can also learn that withholding bowel movements is an excellent way of exercising control over the household.

For this reason, it is important that a thorough assessment is carried out by healthcare workers to exclude any underlying reason for the child not wanting to use the toilet. A careful history of the problem needs to be taken, including the duration of the problem and whether the child has ever used the potty appropriately.

It is important to establish whether the problems coincided with any notable event, such as the birth of a new baby. Also, the response of other members of the family needs to be noted, especially if the child receives extra attention through his or her behaviour.

If the child appears frightened or anxious about opening his or her bowels, any underlying constipation needs to be excluded as this could cause pain on defecation or even result in an anal fissure. Any fears the child may have about sitting on the toilet, such as falling into the bowl, also needs to be checked. All of these problems need to be excluded before devising any strategy for getting the child to use a potty/toilet to defecate.

When any underlying causes have been excluded or dealt with, a programme needs to be worked out that will facilitate the child eventually using the toilet or potty appropriately to open his or her bowels.

The author usually suggests that the family meet the child halfway and initially continue to allow the use of a nappy. However, the child must put it on in the bathroom and remain there until he or she has opened their bowels. Only then can the nappy be removed.

The family must then work on encouraging the child to stand next to the toilet and then to sit on it (with the nappy on initially). This can be done by using an incentive chart that has a small reward for progress (for example one that uses 'stars'). Families then work on removing the nappy by either loosening the tapes or cutting holes in the nappy so the faeces falls into the toilet.

A consistent positive approach is important for success and families will often need a lot of support and reassurance.

TODDLER DIARRHOEA

In the West, toddler diarrhoea is the most common cause of chronic diarrhoea in children between 1–5 years (Hoekstra, 1998). Affected children present with three or more watery stools per day, often containing visible food elements. However, these children will be otherwise healthy and growth and development will appear to be within normal boundaries (Kneepkens and Hoekstra, 1996).

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The causes of toddler diarrhoea are not fully understood, but it appears that there is a disturbance in the balance of fluid, fibre, undigested sugars and other foods that reach the colon, resulting in an increase in the amount of fluid that is kept in the bowel.

Normally, of all the water entering the proximal colon, more than 80% will be re-absorbed back into the body. However, young children's colonic water absorption is less effective, potentially resulting in a higher level of faecal water loss. The normal water content of stools is approximately 75%, increasing to 90% in watery stool, therefore, only a relatively small increase in water content (15%) can result in diarrhoea (Wentzl et al, 1995).

Any child experiencing toddler diarrhoea should be assessed for normal growth and

development and constipation. A stool sample should also be obtained to exclude infections and a stool diary kept to record frequency and consistency.

Toddler diarrhoea is not due to food malabsorption or an underlying bowel problem, but rather a lack of water absorption from the bowel and it is important to reassure parents about this. In the author's experience, the main culprit appears to be the over-consumption of fruit juice, which not only displaces fat and fibre from the diet due to its calorific content and diminishing effect on appetite, but also has an osmotic effect, retaining water within the stools. Treatment involves reducing fruit juice intake and normalisation of the diet.

Changing the child's diet to include appropriate portions of the four Fs (fat, fibre, fluid and fruit juices) is the most beneficial strategy. Fat intake should also be increased to 35–40% of the child's total energy intake. In general, this means drinking whole milk, rather than semi or fully skimmed, and including a wide range of dairy products, such as yogurts and cheese, in the child's diet.

Ensuring regular meal times instead of 'snacking' also provides the opportunity for increased fibre intake. Parents should include fruit, vegetables and wholemeal bread in these regular meals as this will help bulk up the stools and absorb water from the bowel.

Fruit juices (especially clear apple juice) should not be taken in

excess and if possible children should be encouraged to drink water or milk, particularly in between meals, so that their appetite is not affected.

OVERFLOW FAECAL INCONTINENCE ASSOCIATED WITH CHRONIC CONSTIPATION

In the case of overflow faecal incontinence, soiling results from the involuntary passage of stool into the child's underwear as a direct result of chronic constipation. Importantly, soiling may be the first symptom that the child presents with, however, the child may have suffered with undetected constipation for many months.

Chronic constipation is said to be the cause of soiling in 95% of affected children (Loening-Baucke, 1997). The soiling is thought to be due to a variety of factors, including the over-secretion of mucus due to rectal irritation, straightening of the anorectal angle and decreased rectal sensation. These can be combined with reflex relaxation of the anal sphincter, all of which are provoked by the retained stool in the lower bowel.

Parents often feel the child is to blame for the soiling, citing such factors as 'laziness' and 'naughtiness'. Many of these children, not surprisingly, also present with behaviour problems. However, in the author's experience, behaviour profiles in these children can significantly improve following successful treatment. It is important that the child and family understand that soiling

is involuntary and this should help to alleviate any blame placed on the child. Addressing the underlying constipation will usually result in the resolution of the soiling.

Treatment involves the combination of appropriate laxatives combined with a toileting programme. Recent evidence suggests that the use of movicol paediatric plain is both clinically and cost effective (Guest et al, 2007).

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ENCOPRESIS

Encopresis is the passage of normally formed stools in a socially unacceptable place (either voluntary or involuntary) by a child over the age of four years and in the absence of any underlying constipation. It is thought to be behavioural in origin. However, children with encopresis represent only a very small percentage of the total number of children with faecal incontinence.

Encopresis is also sometimes termed 'functional non-retentive faecal incontinence' and treatment focuses on addressing any underlying issues, such as fear of using the toilet, and implementing behavioural modification programmes.

MANAGING INTRACTABLE FAECAL INCONTINENCE

For children with conditions such as spina bifida or imperforate anus, faecal soiling can sometimes be an intractable problem, especially during social occasions and when travelling or swimming. In these instances, a method for containing the soiling – albeit for a short period is vital.

The anal plug

The anal plug is a disposable (single use) polyethylene plug. It consists of compressed foam in a conus shape, with a removal cord at one side. It is introduced into the anus with the cord hanging out. After introduction, the plug will expand within a short time to its maximum size, thus closing off the anus and prevent the leakage of faeces. These plugs have been found to be particularly useful in children with spina bifida, although they are not tolerated by all children (Van Winckel et al, 2006; Bond et al, 2007). This is usually either because the plug is not retained or, in the case of children who still have rectal sensation, because the plug instills a constant feeling of needing to defecate.

Transanal irrigation

Transanal irrigation involves instilling warm water into the rectum at body temperature while the child sits on the toilet or lies in the left lateral position. This is done using an irrigation set, which consists of a water bag, tubing and either a cone or more commonly a rectal catheter. The volume of water stimulates the urge to defecate normally into the toilet. The

frequency and the volume of water used vary – families work out their own pattern of use over time as they become familiar with rectal irrigation and its impact on bowel evacuation.

Antegrade continence enema

Antegrade continence enema (ACE) involves the surgical formation of a catheterisable channel leading from the abdomen directly into the bowel. The channel is formed by detaching and re-implanting the appendix, with one end leading into the caecum and the other exiting through the abdominal wall, thus forming a non-refluxing catheterisable channel. This facilitates the use of antegrade washouts to produce colonic emptying (Van Savage and Yohannes, 2000).

The procedure involves the child sitting on the toilet every 1–2 days and passing either a catheter into the stoma or connecting an extension tube to a button. Bowel washout fluid is then introduced, which pushes the faeces out through the anus. The volume and content of the fluid (usually tap water or saline) differs depending on the age of the child.

PRODUCTS

In the case of children with intractable faecal incontinence for whom other interventions are not appropriate, disposable pads may be the best option. A number of companies make pads specifically for faecal incontinence, although not always specifically for children. The frequency and amount of soiling

will determine the best product for each individual child.

When soiling is minimal and infrequent, washable ‘protective pants’ may be suitable. A number of companies also make specialist swimwear for incontinent children.

CONCLUSION

The key to successful management of children with faecal incontinence is early assessment in order to identify the underlying cause of the faecal soiling, and then the timely implementation of the most appropriate management. The emphasis should be on holistic care provided by a multi-disciplinary team. **CE**

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Key Points

- ▶▶ Faecal incontinence in childhood has been reported to result in significant psychological difficulties, including behavioural and emotional problems.
- ▶▶ There are a number of reasons why a child may develop faecal incontinence and to ensure correct treatment it is important to identify the underlying cause.
- ▶▶ The key to successful management of children with faecal incontinence is early assessment.
- ▶▶ The emphasis should be on holistic care provided by a multi-disciplinary team.

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