Overview: Encopresis is diagnosed in children over the age of four years who are having formed or semi-formed stools in their underwear (or other unorthodox places) and is usually secondary to a dysfunctional stooling pattern. Exact incidence is unknown but it is not uncommon and is more typical in boys than in girls by about 6:1. Medical causes for constipation and fecal overflow such as Hirschsprung’s Disease should be considered. History often reveals an episode of large hard stool followed by fecal retention and defecation avoidance. This problem then may perpetuate itself. Some children also experience liquidy stool seepage.

There are strong emotional reactions to fecal soiling in both parents and children. Parents fear that their child is lazy and doesn’t want to take the time to go to the bathroom. Children with encopresis often claim that they don’t know when they have to have a bowel movement and are then embarrassed by soiling. They may hide underwear in their room increasing the problem by creating a strong odor in the house. They may withdraw from peer interactions because of teasing or bullying. In some cases, large bowel movements may lead to clogging of the toilet.

Education/ Demystification:

Initial management includes demystification of the soiling process. Parents need to be advised that in most cases the problem is not due to laziness. Parents should also be advised not to take a punitive approach towards the child with encopresis. The clinician can explain to parents and children that because the colon has become stretched, children often do not recognize when they are about to have a bowel movement (see Figure 1). Hard stools that back up lead to bowel stretching and looser stools may seep out without the child being aware that this is happening. These explanations are essential to help take emotions out of the equation. Drawings depicting a normal and a
stretched colon may be very helpful in explaining why the muscle doesn’t function well. Using a body building, increasing muscle strength analogy is something with which children can often identify.

*Script:* So you see, that stretched muscle is weak and unable to push out all of the stool. We want to help to make that muscle stronger. What can we do to strengthen the bowel muscle? That’s right, we can exercise it. Not by lifting weights but by having a program of bowel exercises.

This can be an introduction to a bowel training program which includes bowel cleansing and bowel training. Challenging the child with a difficult program will often recruit their natural industriousness and help the program succeed.

---

**Figure 1**

Treatment of chronic functional constipation and fecal incontinence in infants and children, George D Ferry, Up to Date 2011.
Assessing Motivation: A key component of any treatment program is assessing the motivation of both parents and child in addressing the problem. The clinician may ask parents and the child “how important is it to you to stop the soiling and have clean underwear?” Children with encopresis may be so habituated to soiling that they require active encouragement to participate in a bowel training program. If either the child or parent is resistant, facilitated referral to a structured program or counseling should be considered.

Treatment: Bowel Cleansing

- Bowel clean out is the first essential component of intervention. Using an effective laxative such as polyethylene glycol (Miralax) on a daily basis may be sufficient to clean out the bowel. Additional laxatives may need to be added to achieve this goal. Osmotic laxatives such as lactulose (1 ml/kg up to a max of 15-30 ml per day), or magnesium hydroxide (milk of magnesia) (1 to 2 mL/kg once daily); or stimulant laxatives such as senna (age 4-6 years- ½ tsp once or twice daily; age 6-12 years- 1 tsp once or twice daily) may be useful adjuncts to Miralax. Dosages of laxatives may need to be adjusted if the child’s stools become too loose

- Some children who are impacted with stool do not respond initially to just oral laxatives and may require a more aggressive clean out before oral laxatives can be effective. One approach is to initiate 3 day cycles of a Dulcolax tablet on day #1, a Dulcolax suppository on day #2 and a Fleets pediatric or adult enema on day #3. The 3 day cycle can be repeated 3-4 times taking 9-12 days to complete. Abdominal films before and after clean out may be helpful to ascertain effectiveness of the clean out regimen. On some occasions, children may require an inpatient 24 hour regimen of GoLytely per NG tube to achieve an effective clean out

Treatment: Bowel training

The goal should be for the child to have daily bowel movements that are not huge or extremely hard and are easily passed. The stool is kept soft with the use of long term stool softeners. Miralax is a good choice to achieve this goal and will be needed to be continued for several months (or longer) to effectively allow the bowel to resume normal function. The child is encouraged to sit on the toilet for 10 minutes twice a day. Efforts should be made to make this a positive time while reminding the
child that he is there to try and have a bowel movement. A sample bowel training program is demonstrated below.

SAMPLE BOWEL TRAINING PROGRAM:  (Continue for 3-6 months)

1- Stool Softener - Miralax, 1 capful in 8 oz. of water daily

2- High Fiber Diet including whole grains, fruits and vegetables (consider eliminating cow’s milk)

3- Sit on the toilet trying to have a BM 10 minutes twice a day after breakfast and after dinner
   Take a book or I Pad to help pass the time

4- Track success on a calendar

- Behavior Modification: the clean out regimen can be coupled with a behavior modification plan (see behavior modification module) in which the child receives stars or stickers for having a bowel movement in the toilet. For instance, when the child obtains 2 stickers (see below), the child can receive a mutually agreed upon treat/reward. Eventually the rewards can be received when the child obtains 5 stickers, then 8 stickers, etc. Clean underwear, ultimately the goal of the program, should also be tracked and rewarded. The behavior modification system can eventually be phased out when the child is having regular bowel movements in the toilet

- School age children may require cooperation by their teachers to allow the child to use the bathroom when required. Having access to a clean set of clothes may also prevent embarrassment

- Parents should be advised to contact the practitioner if the child’s bowel habits start to reverse (e.g. BM’s every 3 days, hard or large stools, recurrence of soiling)
Sticker chart

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9 – 12 AM</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>12 – 3 PM</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 PM - bedtime</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Treat (child gets a treat/reward each day for earning 2 out of a possible 3 stickers for a BM in toilet). The child may also earn an additional reward at the end of the day if underwear remains clean.

- **Follow up** should be frequent, with at least monthly meetings to evaluate progress, make adjustments, and encourage continued training. Bowel training needs to continue for a period of 3-6 months for the bowel to regain its normal tone. Slow withdrawal of the training regimen with continued calendar monitoring helps to prevent relapse.

Bowel training programs have shown a success rate of about 75%, with the remainder of the patients continuing with functional constipation. Referral to a gastroenterologist may be indicated if the child’s encopresis is refractory to initial interventions by the primary care practitioner. Occasionally the onset of encopresis is secondary to more significant events, e.g. sexual abuse and requires a more intensive mental health treatment. Tertiary centers often have teams in their encopresis clinics, which include mental health professionals to more comprehensively address these problems. In such cases, referral earlier rather than later is highly recommended.
References

Treatment of chronic functional constipation and fecal incontinence in infants and children, George D Ferry, *Up to Date* 2011.
