Nutritional, Medical and Behavioral Treatment of Encopresis

Maj Jeffrey E. Hansen, MS, (USA Res)*
H.L. Munsinger, PhD**
S.C. Parkison, MS, (USA Res)†

The authors describe the etiology and treatment of a relatively common childhood problem—encopresis. They emphasise the devastating effects that this condition can have on the psychological development of the child.

Functional encopresis is a relatively common childhood problem occurring in approximately 3% of the population. The disorder often has a devastating effect on the child's psychological development because of guilt, shame and rejection. Encopresis as defined by the DSM-III-R is the "repeated passage of feces into places not appropriate for that purpose (eg, clothing, floor) whether involuntary or intentional."[1] The current pediatric and psychological literature suggests that voluntary soiling is rare, and involuntary soiling has several causes.

Some clinicians prefer to differentiate between primary and secondary encopresis. Primary encopresis is said to occur among children past the age of four years who have never had a one-year period of bowel continence. Secondary encopresis is said to occur among children past four years of age who have had one year of bowel continence and then become incontinent for any of various reasons. There is little research evidence to support the distinction, either in terms of differential causation or in terms of the most appropriate treatment program.[2]

Functional encopresis often has ruinous effects on the child's social relations and self-esteem. Encopretic children frequently experience significant guilt and shame because of their inability to control bowel function, and they constantly fear that the problem will be discovered by their peers. When their disorder is discovered, encopretic children often become the target of ridicule and rejection in school and the neighborhood. In our clinical experience, we have often noted that encopretic children develop multiple psychological problems following the discovery of their encopresis. Their psychological difficulties include depression, displine problems, poor self-esteem, withdrawal, and academic decline.[2]

Differential Diagnosis of Encopresis

Chronic Diarrhea: These children expel feces in a diarrheic fashion and react to stress with periods of incontinence. Diarrhea occurs during intervals of stressful life events and, between events, the symptoms subside.

Irritable Bowel Syndrome: This disorder is related to chronic diarrhea, and it results in recurrent abdominal pain, which sometimes includes diarrhea and is thought to be a precursor of irritable bowel syndrome in adulthood.

Hirschsprung Disease: A biological disorder characterized by the absence of nerve cells in the intestine. The absence of sensory feedback from the gut results in soiling difficulties beginning at birth or during the first few weeks of life. These children typically exhibit symptoms of intestinal obstruction such as vomiting, abdominal distention, and failure to pass stool. Later in life, these children display chronic constipation and, upon rectal examination, are found to have tight anal tone without large amounts of feces in the rectal ampulla.

Functional Encopresis: Children suffering from functional encopresis usually do not develop bowel problems early in life. They typically display patulous anal tone, and the rectal ampulla is usually packed with feces.

Etiology of Encopresis

Encopresis and emotional problems often coexist among these children and may even appear to be causally related. However, most encopretic children are not emotionally disturbed and their families appear to be stable.[3] Although the suggested initiating factors of encopresis range from minor psychological, anatomical, physiological, and dietary abnormalities, the most likely explanation is that the causes of encopresis are multifaceted and interrelated.

The physiological basis of encopresis is chronic or intermittent retention of feces, which results in the distension of the rectum and colon, thus producing a lack of sensitivity for an adequate defecation reflex. As fecal motility within the colon slows, the absorption of water from the fecal material is increased and the stool becomes large and hard. Attempted passage of the large, hard stool is almost always painful; so the child avoids defecation, which worsens the problem.

Prolonged encopresis can lead to rectal impaction of the large, hard stool. Following impaction, the watery contents of the higher colon are passed around the retained stool resulting in frequent, involuntary soiling. Furthermore, the loss of sensory feedback from the bowel makes the child unaware that he is about to pass fecal material. The involuntary soiling generally results in liquid staining of the underwear rather than a complete bowel movement and may be difficult to distinguish from poor bathroom hygiene.

*Formerly, Director, Pediatric Psychology Fellowship, Clinical Psychology Service, Madigan Army Medical Center, Tacoma, WA; now, PhD Pediatric Clinical Psychologist, 1013 Cooper Point Rd, Olympia, WA 98502.

**PhD Clinical Psychologist and Forensic Expert, 745 E. Mulberry, Suite 240, San Antonio, TX. 78212.

†PhD Pediatric Psychologist, 5909 Orchard West, Tacoma, Wa 98467.

Treatment of Encopresis

Once the diagnosis is established, the first step in treating encopresis is to ensure that the colon can remain undistended for sufficient length of time to restore normal tone and defecation reflexes. The protocol we recommend was developed by Parkison and Kelly; it is a combination of nutritional, medical, and behavioral treatments.[2]

I. **Dietary management:**

Limit milk intake to three cups daily.

Eliminate cheese from diet.

Four to six servings of high fiber foods daily.

Six to eight glasses of liquid daily.

II. **Clean out, days 1-3:**

Administer two fleets enemas daily, one in the morning and one in the evening. Amount will depend on the age and size of the child and must be determined by a pediatrician.

III. **Establishment of normal bowel habits:**

A. Have child sit on toilet for no more than five minutes after breakfast. If child has a successful bowel movement (an amount equivalent to ½ cup), he should be praised and allowed to select an individually wrapped reward (eg, a matchbox car).

B. If the child is unable to have a bowel movement after 5 minutes, insert a glycerin suppository in the anal cavity and wait for up to 45 minutes. During this interval, have the child dress. If he is able to have a successful bowel movement, he is to be praised and allowed to choose a smaller individually wrapped gift (approximately 50 cents in value).

C. If unsuccessful at having a bowel movement with the aid of a glycerin suppository after 45 minutes, administer an enema and give no rewards.

IV. **Communication is essential.**

Ongoing communication between parents, teachers, the school nurse, and the treating psychologist/physician is essential. If you encounter any difficulty with the treatment, contact the treating psychologist/physician.

Verification of the bowel movement is critical to ensure that the child is reporting honestly and to determine the need for the medical treatment (ie, suppositories and/or enemas). Younger school age children must be monitored by the school nurse who can report to the parents on a daily basis if a bowel movement has occurred. The parents can provide appropriate backup reinforcement or medical intervention. We recommend that the child be allowed free access to the nurse's bathroom during the treatment period. In some cases, scheduled, school bathroom sessions may be necessary.

REFERENCES

1. American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders.* ed 3. Washington, DC, 1987.
2. Parkison SC, Kelly PC: Multidisciplinary treatment of encopretic children, in Roberts MC, Walker CE (eds): *Casebook of Child and Pediatric Psychology.* New York, The Guilford Press, 1989, pp 298-318.
3. Walker CE, Milling LS, Bonner BL: Incontinence disorders: Enuresis and encopresis, in Routh DK (eds): *Handbook of Pediatric Psychology,* New York, The Guilford Press, 1988, pp 363-397. ●

TEN COMMANDMENTS OF PATIENT CONSIDERATION

The Patient is not in a normal condition—he is in a state requiring medical attention and personal understanding.

The Patient is not a routine concern—he is an individual case requiring individual evaluation and treatment.

The Patient is deserving of the most courteous and attentive treatment we can give him.

The Patient has devoted part of his life to our country or is dependent on someone who has.

The Patient is not an interruption to our work—he is the purpose of it.

The Patient is here because he needs to be—not necessarily because he wants to be.

The Patient is not a cold statistic—he is a flesh and blood human being with emotions and feelings like our own.

The Patient is not someone with whom we should argue or match wits.

The Patient is deserving of professional treatment by personnel who keep abreast of the latest knowledge and techniques of modern medical research.

The Patient is the most important person in our mission.

Col(Ret) Frederick Timmerman