Bowel management

Bowel management is a medical approach to manage fecal incontinence or constipation. [*Ramon S Lansang [http://www.emedicine.com/pmr/TOPIC230.HTM Bowel Management] eMedicine May 7, 2008*] [*Marc A Levitt [http://www.emedicine.com/ped/topic2963.htm Constipation and Bowel Management] eMedicine Aug 27, 2007*] Bowel control is often a challenge for children who are born with anorectal anomalies, Hirschsprung's disease, and/or spina bifida. Some patients have a poor prognosis and will never have the ability for bowel control, and in turn, benefit from using bowel management techniques.

Overview

Bowel management is mainly achieved through the administration of a daily enema which empties the colon to prevent unwanted and uncontrolled bowel movements throughout the rest of the day. [*Peña A, Guardino K, Tovilla JM, Levitt MA, Rodriguez G, Torres R Bowel management for fecal incontinence in patients with anorectal malformations Pediatr. Surg. 33:1 133–7 1998*] The use of laxatives and a controlled diet may also be part of one's bowel management regimen. Determining the appropriate regimen to attain successful bowel management occurs under medical supervision that is highly individualized often requiring a trial and error approach over the course of one week. The patient has an X-ray taken which is reviewed by the physician who then recommends the course of action in the form enema, laxative, and/or diet the patient is to take. The next day, the process is repeated with modifications to the course of action in order to help the child achieve a completely empty colon. After the course of this week the precise amount and combination of what the patient requires in order to achieve management of his or her bowel is determined by the physician. From then on the patient can continue the regimen on their own. [*Peña A, Guardino K, Tovilla JM, Levitt MA, Rodriguez G, Torres R Bowel management for fecal incontinence in patients with anorectal malformations Pediatr. Surg. 33:1 133–7 1998*]

Bowel management does not cure fecal incontinence, but has the ability to greatly increase the quality of life of a person. With successful bowel management, a child may be more apt to establish their independence in normal daily life and may allow even children with severe incontinence to go to school and participate in activities they otherwise would never be able to. [*Peña A, Guardino K, Tovilla JM, Levitt MA, Rodriguez G, Torres R Bowel management for fecal incontinence in patients with anorectal malformations Pediatr. Surg. 33:1 133–7 1998*]

Depending on the prognosis, some patients will continue using these techniques for life while others may gain some degree of bowel control and become potty trained. Children who practice bowel management often become unhappy as they age, especially upon puberty, due to feeling that the administration of enemas is an intrusion on their privacy, and it is difficult for them to administer the enema themselves. Consequently, an operation called a continent appendicostomy or "Malone procedure" is available. This allows somebody to give themselves an enema by inserting a catheter into a small orifice at the belly button. [*cite journal |author=Perez M, Lemelle JL, Barthelme H, Marquand D, Schmitt M |title=Bowel management with antegrade colonic enema using a Malone or a Monti conduit--clinical results |journal=Eur J Pediatr Surg |volume=11 |issue=5 |pages=315–8 |year=2001 |month=October |pmid=11719869 |doi=10.1055/s-2001-18554*] [*Levitt MA, Soffer SZ, Pena A. Continent appendicostomy in the bowel management of fecally incontinent children. J Pediatr Surg. Nov 1997;32(11):1630-3*]

Fecal incontinence

The medical definition of fecal incontinence is: The incapacity to voluntarily hold feces in the rectum. There are two subgroups to those with fecal incontinence: Real fecal incontinence and Pseudoincontinence. [*Levitt MA, Soffer SZ, Pena A. Continent appendicostomy in the bowel management of fecally incontinent children. J Pediatr Surg. Nov 1997;32(11):1630-3</< i>]*

Real fecal incontinence

For a child with real fecal incontinence, the normal mechanism of bowel control is not working. An alteration of the muscles that surround the anorectal canal along with poor sphincters (those muscles which control the anus) are responsible for fecal incontinence in children operated on for anorectal malformations with a bad prognosis. Some patients operated on for Hirschsprung's disease have this anatomic problem as do those with spinal problems. The innervation (supply of nerve connections) of these muscles is important for their correct function. A deficit of the innervation occurs in anorectal anomalies as well as in other conditions. For example, in cases of Spina Bifida, or following spinal cord injury, the contraction and relaxation of the muscles, as well as sensastion, are both deficient. Thus, the presence and the passage of stool and the perception of the difference between solid and liquid stool and gas are limited.

Pseudoincontinence

In cases of pseudoincontinence, a child is believed to suffer from fecal incontinence. However, investigatino shows that he or she suffers from severe constipation and fecal impaction. When the impaction is treated and the patient receives enough laxatives to pass stool, he or she becomes continent.

Candidates for Bowel Management

Children who suffer from fecal incontinence after the repair of an imperforate anus are usually those born with a bad prognosis type of defect and severe associated defects (defect of the sacrum, poor msucle complex). However, children who were born with a poor prognosis type of defect can still achieve a good quality of life when treated with the bowel management program. Children operated on for imperforate anus and who suffer from fecal incontinence can be divided into two groups that require individualized treatment plans:

Children with Constipation (Colonic Hypomotility) *No special diet or medications are necessary for children with colonic hypomotility or constipation. Their tendency towards constipation helps them to remain clean between enemas. The real challenge is to find an enema capable of cleaning the colon completely. soiling episodes or "accidents" occur when there is an incomplete cleaning of the bowel.*

Children with Loose Stools and Diarrhea (Colonic Hypermotility) *This group fo children has an overactive colon. Rapid transit of stool resutls in frequent episodes of diarrhea. This means that even when an enema cleans the colon rather easily, stool keeps on passing fairly quickly from the cecum to the to the descending colon and the anus. To prevent this, a constipating diet and/or medications to slow down the colon are necessary. Eliminating foods that further loosen bowel movements will help the colon to slow down. Those who experience hypermotility may have to follow a constipating diet and avoid laxative foods. The diet is rigid and includes food such as banana, apple, baked bread, white pasta with no sauce, boiled meat, and others. While fried foods and dairy products are avoided. [Levitt MA, Soffer SZ, Pena A. Continent appendicostomy in the bowel management of fecally incontinent children. J Pediatr Surg. Nov 1997;32(11):1630-3]*