MUSC PEDIATRIC SURGERY BOWEL MANAGEMENT PROGRAM

The Bowel Management Program has been specifically designed to help children who have previously undergone surgical correction of Hirschsprung disease and anorectal malformations and now experience bowel control issues. Fecal continence is a pivotal achievement in a child’s development, but unfortunately for children born with anomalies of large bowel; this process is often challenging and may require medical intervention.

While in the past surgical intervention has been thought to be curative, we know that these patients often have lifelong problems with constipation, soiling, and incontinence. This program seeks to expand the treatment beyond the early post-operative period by giving patients and their families the tools to manage their disease on a day to day basis. The goal is to help those patients and their families achieve being accident free for 24 hours. This will allow children to go to school in normal underwear, and avoid the social stigma which often follows children those who do not achieve bowel.

Since every child is different, the single most important aspect of this program is close communication and teamwork with our patients and their families to establish an effective bowel regimen.

What types of patients are candidates for the Bowel Management Program?

- Children with fecal incontinence (i.e. inability to voluntarily control bowel movements) after surgical repair of imperforate anus or Hirschsprung’s disease.
- Children who suffer from severe constipation and pseudo-incontinence (i.e. overflow of stool) after surgical repair for imperforate anus or Hirschsprung’s disease.

What should we expect at each visit?

- Your pediatric surgeon will review your child’s surgical history and talk with you about your child’s bowel movements. He will ask specific questions about your child’s daily activities and bowel pattern.
- Your pediatric surgeon will examine your child, focusing on his or her abdomen. He may perform a rectal exam.
• Your child may have an abdominal x-ray prior to or following his or her appointment. The x-ray will show if your child is constipated and help the surgeon select the best treatment for your child.

How to prepare for each visit?

• Keep a record of your child’s stool pattern
  o How many bowel movements does your child have each day?
  o What do the bowel movements look like? Are they large or small? Are they hard, soft or liquid?
  o When does your child have a bowel movement? In the morning? In the evening? While at school?

• Keep a record of your child’s medications
  o What type of laxative medication do you give your child? How much?

• Keep a record of your child’s diet
  o What types of food does your child eat? How much water does your child drink on average per day?
  o Do certain foods appear to affect your child’s bowel movement?

What other tests may be required?

This largely depending on your child’s underlying condition. They may include:

1. Contrast Enema – dye is infused into the rectum through a catheter to better visualize the colon

2. Examination under anesthesia

3. MRI Evaluation of the Spine (for patients with history of imperforate anus)

Successful bowel management requires a complementary relationship between you, your child and the pediatric surgery team. Since treatment is often patient specific, achieving our mutual goal requires individualization of the protocol which is achieved by trial and error. It is important for you to keep your appointments and to call with any questions or concerns.

Our Team: We can be reached at 843-792-3851

Julie Mansfield, PA                         Dr. Robert Cina, MD, pediatric surgeon
Patty Randinelli, RN                        Dr. C.D. Smith, MD, MS, pediatric surgeon
Kiften Stephens, NP
How do the bowels work?

Bowel function is complex. The primary job of the colon (i.e. large intestine) is to absorb water and serve as a reservoir for stool. Every 24-48 hours, the rectosigmoid (i.e. the end of the colon) contracts in waves signaling to the body that it must be emptied. Upon recognizing this signal, the individual voluntarily withholds the stool until it is socially acceptable to release it.

Fecal continence (i.e voluntary control of your bowels) requires three components: (1) sensation within the rectum, (2) good motility of the colon, and (3) good voluntary muscle or sphincter control. Children who have anorectal malformations, such as imperforate anus, lack all or some of these essential components. Children who have had surgery for Hirschsprung disease may have lost some of these components because of their pelvic surgery.

Your child’s ability to gain voluntary control of his or her bowels depends on the type of anorectal malformation he or she was born with and the type of surgery he or she has had.

What is constipation?

Constipation refers to infrequent and difficult to pass bowel movement. Signs and symptoms of constipation include stools that are hard, dry, small in size, and difficult to eliminate. Some people who are constipated find it painful to have a bowel movement and often experience straining, bloating, and the sensation of a full bowel.

What is incontinence?

Incontinence refers to the inability to voluntarily control bowel movements.

There are different types of fecal incontinence and it is important to recognize and understand the difference between each type.

Fecal incontinence. A patient with true fecal incontinence does not have the necessary sensation and muscle control to voluntarily empty his or her bowels. These patients may suffer from constipation or diarrhea, depending on the type of surgical repair they have had. This condition is manageable but not reversible.

Pseudo-incontinence (also known as encopresis or overflow incontinence). A patient with “pseudo”-incontinence has the necessary sensation and muscle control to voluntarily empty his or her bowels. These patients have accidents and soiling episodes because they are severely constipated and their colon is impacted with stool. Liquid stool leaks around stool impaction. The colon often become so distended with stool that normal bowel function and sensation is temporarily disrupted. This condition is reversible.
What is the treatment for constipation and incontinence?

Constipation is treated with dietary modifications, behavioral modifications and medications. The goal of constipation therapy is for your child to have a normal, full evacuation of soft stool every day or every other day.

Diet: increase daily fiber and water intake. We recommend a diet rich in whole grains, fruits and vegetables. In addition, keep a water bottle easily accessible to your child and encourage frequent drinking.

Behavior: “potty time” daily is very important. Have you child sit on the toilet for 15-20 minutes each morning after breakfast.

Medications: There are many laxative medications available. Some medications are used to “clean out” the colon and some are used to “maintain” a regular bowel pattern.

True fecal incontinence is treated with daily enemas. Large volume saline enemas are usually required to sufficiently clean out the colon every 24 hours. The volume of the enema is typically determined on a trial and error basis. If the patient has soiling episodes between enemas, complete bowel irrigation was not complete and the technique needs to be adjusted. We recommend enema administration 1 hour following a meal to optimize the body’s natural gastro-colic reflex. For older children and teenage patients who require daily rectal washouts and desire independence, an continent appendicostomy (Malone procedure) for antegrade rectal washout can be performed.

Pseudo-incontinence is managed by treating the underlying constipation (see above). The first step to treatment is colon “clean out” with an enema or magnesium based laxative (e.g. milk of magnesia or magnesium citrate). The second step is “maintenance” with Miralax or a senna based laxative (e.g. ex-lax or little tummies).