CHRONIC RETENTIVE CONSTIPATION*

DEFINITION:
“Defecation” is the passage of stool through the rectum. If a child repeatedly resists the urge to defecate and withholds stool in the rectum, a large mass of stool may build up. Chronic constipation is one of the most common ailments of the intestinal tract in children, as well as in adults. Many false beliefs or myths exist concerning what are “normal” bowel habits, why constipation happens, how to treat constipation, and what problems may arise if constipation is untreated. To help you understand chronic constipation, we have collected questions that parents frequently ask about constipation and our answers to these questions. Every child is different, and each child raises specific questions. We hope that after reading these questions and answers you will add your own questions to the list and discuss them with your physician.

What is constipation?
Constipation is defined as the infrequent and difficult passage of stool. It is important to note that the frequency of bowel movements among normal, healthy children varies greatly.

What is a normal bowel habit?
Since bowel habits vary tremendously, the passage of three bowel movements a day or one per week may be normal. A child or an adult is usually considered to have severe chronic constipation if he/she regularly does not have a bowel movement for more than one week.

What controls defecation?
Defecation (passage of a bowel movement) is a complex business that depends on the successful interaction of learned and involuntary behavior. The rectum, the lowest part of the bowel, collects fecal (stool) material as it is formed and passed on from the upper colon. The fecal material is prevented from leaking out of the rectum by the action of two muscles, the internal anal sphincter, and the external anal sphincter (the external sphincter is the muscle you can voluntarily squeeze shut when attempting not to defecate). Under normal conditions these sphincters are closed, but when stool enters the rectum, the internal sphincter relaxes. There is no control over this relaxation. Stool then presses on the external sphincter, creating the urge to defecate, or to have a bowel
movement. During defecation, both sphincters relax and stool is pushed out by both muscle activities in the colon and voluntary forceful “bearing down.” If a child does not wish to have this happen, he/she can forcefully contract the external sphincter and push stool back up into the colon away from the sphincters (“withholding”), thereby getting rid of, temporarily, the urge to defecate.

**How does a child develop chronic constipation?**

This mass becomes less easy to pass as it becomes larger and more dried out. The child may eventually be unable to hold stool in and with tremendous effort may pass a huge stool, thus relieving the rectal pressure until another fecal mass builds up. The child may, however, be unable or unwilling to pass the stool regardless of its size. The rectal muscles and the external sphincter become fatigued with the effort of retaining stool and in time, partially relax and “stretch out”. Liquid fecal material from high in the colon will trickle down around the solid mass of stool in the rectum and will leak uncontrollably through the anus into the child’s underwear. The child has no sensation of the passage of this liquid stool and has no control over this action (and therefore should never be punished for this), which is called fecal soiling or encopresis. Fecal soiling commonly occurs in the late afternoon or evening and less commonly during school or at night. Fecal soiling may also occur many times daily.

Many children who experience soiling display a cyclic pattern of symptoms with progressively severe soiling, loss of appetite, and decreased physical activity before finally passing a very large bowel movement. These children then feel better, eat better, and experience no soiling for a period of time until the cycle begins again. This pattern of fecal retention, constipating, and soiling may result from a number of causes. Whatever the primary cause, once the pattern is established it becomes a vicious cycle, with stool withholding (retention) leading to dislike (because of pain) or inability to have a bowel movement (defecate), which leads to more voluntary withholding of stool.

**What are some of the causes of constipation in children?**

Constipation is a common symptom in children and may be related to:

- **Pain:** Constipation may result in pain when the child passes firm bowel movements. Cracks in the skin, called fissures, may develop in the anus. These fissures can bleed or increase pain, causing a child to withhold his/her stool.

- **Illness:** A child who has a brief illness with poor food intake, fever, and no physical activity may develop constipation, which will persist after the acute illness is over.

- **Poor Bowel Habits:** A cycle of constipation can be initiated by ignoring the urge to defecate. Teenage girls and boys may be fussy about using bathrooms other than those at home and may become constipated by refusing to use school or public toilets. Children may ignore the urge because they are “too busy.” After a period of time, the child may stop feeling the urge to poop because of rectal distension (“stretching out”).

- **Emotional:** Sometimes children because of emotional problems or inappropriate attempts to or lots of pressure to toilet train will voluntarily withhold stool until the problem of fecal soiling results.
• **Travel:** Often, constipation will be experienced when traveling long distances. The reason for this is not clear, but may be related to changes in lifestyle, schedule, diet, and inadequate water intake.

• **Poor Diet:** Constipation may result from a decrease in intake of high-fiber foods (vegetables, fruits, and whole grains). Children who drink overly large quantities of milk (more than 3 cups/day) or lots of cheese often become constipated. Some studies have shown that high-fiber diets may result in larger stools, more frequent bowel movements, and therefore, less constipation.

• **Muscle or Nerve Damage:** Some children with muscle disease or neurologic disorders may be constipated. These and other unusual causes of constipation can be easily ruled out by your physician.

**Is constipation harmful?**

Stool is normal in the colon and is not poisonous to the body. Constipation is often thought to cause a variety of symptoms including headache, bad breath, hyperactivity, and poor school performance. There is no proof of this. Occasionally children who have a huge fecal collection in the colon will be tired and somewhat irritable, with poor appetite or abdominal pain. These symptoms usually pass with relief of constipation. The colon will not rupture with huge fecal masses, but some real complications may result. The large fecal mass may press on the urinary bladder and the ureters (the tubes that bring urine from the kidneys to the bladder), causing obstruction or infection in the bladder or kidneys. Occasionally the hard stool may irritate the lining of the colon until a small ulcer is formed. The ulcer may bleed, and small amounts of bright red blood may be noted in bowel movements or on underwear. This bleeding may also be caused by an anal fissure (tear in the bottom when the stool comes out).

**How is constipation treated?**

There are different ways of treating constipation. Your doctor will discuss with you the specific treatment for your child. In general, the program and medications prescribed will help your child retrain his bowel, which has become somewhat stretched out and inefficient, due to chronic fecal retention.

First, the collection of stool in the colon must be removed. This may require laxatives by mouth, enemas, or occasionally manual removal. This emptying of the colon is necessary in severe retention before any bowel retraining can take place.

When the colon is empty, steps will be taken to ensure easy passage of stool. These may include but are not limited to:

- Giving a stool softener or mild laxative (such as Ex-Lax). Laxatives should only be given for a few days at a time maximum. Fiber supplements such as Citrucel or stool softeners such as Miralax (both over the counter) may be very useful on a daily basis.
- Altering the diet to include more high-fiber foods.
- Encouraging your toilet-trained child to sit on the toilet at regular times each day. Have your child sit on the toilet 2 or 3 times per day for no more than 3 to 5 minutes. Some suggested times may be after first waking in the morning, a half-hour after meals, or after arriving home from school. If your child’s feet do not
touch the floor, supply a footstool or box to help your child maintain his balance. Do not encourage the use of reading materials, games, or activities while sitting on the toilet.

- Encourage regular exercise.

During this period of retraining, it is important to keep the colon as empty as possible so that it can regain some muscle tone and prevent an accumulation of stool that could lead to soiling again. Your child should have a bowel movement at least every other day and if not, you should call your doctor to discuss possible strategies to help the situation. This period of retraining may last from 6 to 12 months. During this time, any physical or emotional problems that may have given rise initially to the chronic constipation will be discussed and dealt with appropriately.

After the intensive retraining period, a gradual reduction in medication will be attempted. In many children, retraining will have been so successful that medications may be stopped altogether. Should your child have a relapse and begin to withhold stool again, it is not their fault and can be handled easily by contacting your doctor or starting treatment again as outlined.

An essential element to successful treatment of chronic constipation is a regular follow-up appointment.

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