

CONSTIPATION AND DEFECATION PROBLEMS

By Arnold Wald, M.D., MACG
Department of Medicine
University of Pittsburgh Medical Center
Pittsburgh, PA

Constipation is one of the most frequent gastrointestinal complaints in the USA and Western countries. There are at least 2.5 million doctor visits for constipation in the USA each year and hundreds of millions of dollars are spent for laxatives yearly.

1. How is constipation defined?

Constipation is often thought of as a decrease in frequency of stools and many people believe they are constipated if they do not have a bowel movement each day. This is not correct as many persons have as few as 3 bowel movements each week and are healthy. For many people, constipation means too much straining with bowel movements, passage of small hard stools or a sense that they have not completely emptied their bowels. Any recent change in bowel habits, if persistent, may be cause for concern.

2. What causes constipation?

Constipation most commonly occurs when the waste (stool) that forms after food is digested moves too slowly (slow transit) as it passes through the digestive tract. Dehydration, changes in diet and activity, and certain drugs are frequently to blame to slow transit of stool. When stool moves slowly, too much water is absorbed from the stool, and it becomes hard and dry. Gradual enlargement of the rectum and poor coordination of the pelvic and anal muscles sometimes contribute to or cause constipation. Sometimes a combination of these processes occurs. Another cause, bowel obstruction (blockage), is serious but uncommon.

3. What kind of evaluation should constipated patients undergo?

A doctor usually relies on the person's account of constipation when making a diagnosis. The doctor also examines the rectum with a gloved finger and, if stool is present, determines the amount and consistency. The stool is tested for occult (hidden) blood. The person's symptoms and an examination are often all that are needed to confirm a diagnosis of constipation and to determine the likely cause.

When the cause remains unclear, tests may be done. The doctor may recommend an examination with a flexible viewing tube, either of just the lower part of the large intestine (sigmoidoscopy) or of the entire large intestine (colonoscopy). This examination is important if the constipation developed suddenly or if it is worsening noticeably.



Occasionally, other tests are needed to determine the cause. An abdominal x-ray may show evidence of bowel obstruction or suggest another cause. Another test involves swallowing several capsules containing tiny rings that can be seen on x-rays. An x-ray is taken several days later. Finally, emptying of the rectum can be tested in the laboratory or with special x-rays.

4. What are the treatments for constipation?

When stool is impacted, tap water enemas are commonly used. Usually people are positioned on their left side, with knees flexed. About 5 to 10 ounces of water at body temperature are gently instilled into the rectum and sigmoid colon. When the water is emptied, the impacted stool is passed with it. Nonprescription prepackaged enemas can be used in place of tap water. If enemas fail to work, a health care practitioner may need to remove the stool manually using a gloved finger. The person is then sometimes asked to drink a solution containing dissolved salts and polyethylene glycol, which cleanses the digestive tract.

After the impaction has been removed, the person may be told to add fiber to the diet or to use laxatives to prevent constipation. Laxatives may be used every two to three days if a bowel movement does not occur naturally.

If the stool is not impacted, several options are available for treating constipation. Increasing the intake of fluids and fiber is often the first step. Vegetables, fruit (especially prunes), whole-grain breads, and high-fiber cereals are excellent sources of fiber. Bran is an alternative source. To work well, fiber should be consumed with plenty of fluids.

Laxatives and stool softeners are sometimes needed if changes in diet are insufficient. Most laxatives are safe for long-term uses, if used appropriately.

Bulking agents, such as psyllium and methylcellulose, are laxatives that help hold water in the stool and add bulk to it. The increased bulk stimulates the natural contractions of the large intestine. Bulkier stools are softer and easier to pass. Bulking agents act slowly and gently. These agents generally are taken in small amounts at first. The dose is increased gradually until regularity is achieved.

Osmotic agents are laxatives that keep large amounts of water in the large intestine, making the stool soft and loose. These laxatives consist of salts or sugars that are poorly absorbed. Some contain magnesium and phosphate, which can be partially absorbed resulting in harm to people with kidney failure.

Stimulant laxatives contain substances that directly stimulate the walls of the large intestine (such as senna, cascara, and bisacodyl), causing them to contract. Taken by mouth, stimulant laxatives generally cause a bowel movement in six to eight hours. Some are available as suppositories. When taken as suppositories, these laxatives often work in 15 to 60 minutes. Stimulant laxatives are best used for brief periods. If longer use is



needed, they should be used no more often than every third day and under a doctor's supervision.

Occasionally, a problem with coordination of pelvic floor and anorectal muscles may be identified. This can be treated with biofeedback or muscle retraining exercises; such treatments are performed only in centers which specialize in this area and upon referral by a doctor.

5. Can constipation be prevented?

A combination of an adequate intake of fluids, adequate exercise, and a high-fiber diet may prevent constipation. Laxatives are sometimes a helpful addition to these measures. For example, when a person needs to take a potentially constipating drug, a stimulant laxative along with increased intake of dietary fiber and fluids helps prevent constipation.

