Common Questions About Constipation: Myths and Misconceptions

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In January 2005, Drs. Stefan Muller-Lissner of Germany, Michael Kamm of the U.K., Carmelo Scarpignato of Italy, and Arnold Wald of the U.S., all noted gastroenterologists and experts on the treatment of constipation, published a review article discussing various myths and misconceptions about constipation and its treatment.[1] Though most of the issues discussed in the article are well understood by the medical practice community, they persist among the general public and are still promoted by those who are uninformed. Hence, a brief discussion of the review article is relevant.

Is there a danger from constipation that stool can remain for too long a time period in the colon? Can this cause other disease?

Since ancient times there has been a belief that when stool resides in the colon for too long, "toxins" in the stool are released and can cause disease. This theory, which is referred to as "autointoxication" had a resurgence in the early 20th century, at which time the use of frequent enemas, cleansing purgatives, and even surgical removal of part or all of the colon were popular. Even today, colon cleansing with various purgative and enema procedures is promoted to maintain "colon health." However, there is no foundation in science for this theory. No data have ever shown that toxins are generated in the colon to be absorbed and contribute to other diseases. Autointoxication is a myth. While surgical removal of the colon is used, though very rarely, as a treatment in extreme cases of chronic and untreatable constipation, it is only considered when constipation has proven unresponsive to all other means of medical treatment and the colon is proven to have a local neuromuscular disorder.

Can changes in hormones cause constipation?

Some studies have associated hormonal changes with constipation. For example, small studies show that women with severe idiopathic (of unknown cause) constipation have a reduction in sex hormone levels in the blood. Other small studies have reported a diminished release of gastrointestinal hormones in response to meals in chronically constipated patients. Despite such observational correlations, there is no evidence for a cause and effect relationship. Rather, it appears that changes in hormone responses are secondary to alterations in gut function or metabolism.

Is constipation caused by low intake of fiber or fluid?

There is a general concept that low intake of fiber or fluids may commonly cause constipation. Western diets often provide only about 1/3 of the daily levels of fiber intake recommended by nutritionists. Hence, fiber, often provided as supplements or over the counter drugs, is widely used to treat constipation. Fiber clearly increases stool bulk and frequency, and decreases transit time in healthy people, and may benefit individuals with relatively minor or occasional constipation. However, the few studies in which dietary fiber has been used to treat chronic constipation have not demonstrated significant benefit. Thus, many conclude that low fiber intake cannot be a cause of chronic constipation, and that increasing fiber intake is unlikely to offer significant benefit for patients with more severe constipation. Nevertheless, a high fiber diet should be tried before embarking on long-term drug treatments or special testing.

There is also a belief that constipation can occur from drinking insufficient liquid. Even small changes in stool water content can considerably alter stool consistency. Osmotic laxatives work by this rationale. These agents (e.g., milk of magnesia or lactulose) help retain water in the stool. Normally, the colon absorbs very large amounts of water – almost 90–95% of the water that enters it daily. Therefore, simply adding a small amount of fluid to one's diet, say 1 or 2 additional glasses of liquid, will not have an effect on constipation. So far, research does not support increasing fluid intake to relieve constipation, but dehydration should be avoided.

Is the long-term use of stimulant laxatives for constipation unhealthy or unsafe?

Laxatives are among the most commonly used medications. Stimulant laxatives, though indicated for occasional or short-term use, have been associated with concerns about their safety – specifically that they damage the intestine, increase the risk for colorectal cancer, and produce dependency.

The belief that chronic use of stimulant laxatives causes damage to the intestine and colon is based on uncontrolled

human studies. Though damage to nerves and muscle was observed, it is impossible to assign any cause-effect relationship. The data cannot explain if damage was due to laxative use (which was not documented), or whether it was part of the ongoing disease and the reason for the laxatives in the first place.

In the only controlled study conducted to date, constipated patients treated with stimulant laxatives did not develop damage to their colons when compared to controls who did not receive laxatives. Hence, it is unlikely that stimulant laxatives are harmful when used at recommended doses. Nevertheless, the use of excessive laxatives over long periods has led to some serious metabolic consequences, such as dangerously low serum potassium.

Despite one study reporting an association of constipation and the use of stimulant laxatives with an increased risk for colorectal cancer, the association is weak, and is actually less than that imposed by dietary factors alone (e.g., fat, meat, alcohol, low-vegetable intake, low-fiber intake). Subsequent studies have demonstrated no such association.

Are stimulant laxatives habit forming?

Although tolerance to laxatives has not been well studied in humans, animal data do not support development of tolerance. In one human study, no tolerance was observed in patients with constipation due to spinal cord injury who used bisacodyl for up to 34 years. A few patients with severe chronic constipation may find that they respond less to laxatives after prolonged use and may require larger doses. However, this is relatively uncommon. There are no data that suggest that laxatives are addictive or habit forming. Clearly, individuals with chronic constipation may require continued therapy, and may relapse when it is discontinued. However, this is not a sign of addiction or habituation.

Overall, the available data indicates that laxatives are safe and effective treatments for constipation. If patients with constipation find that their treatments are becoming less effective, then it is time to consult a doctor about alternatives.

References:

(1) Muller-Lissner SA, Kamm MA, Scarpignato C, Wald A. Myths and misconceptions about chronic constipation. *Am J Gastroenterol* 2005; 100:232-242.

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