



Constipation

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Introduction

The general definition of constipation is having fewer than three bowel movements a week and stools are difficult to pass. When constipation becomes a chronic condition, the infrequent bowel movements or difficulty to pass stools persists for several weeks or longer. Although constipation is a common complaint, it may interfere with the ability to go about daily tasks. Chronic constipation may also cause people to strain excessively to have a bowel movement. Constipation most commonly occurs when the stool moves too slowly through the digestive tract or cannot be eliminated from the rectum, causing the stool to become hard and dry.

Constipation can affect people of all ages. However, the following people are more likely to suffer from constipation or develop chronic constipation. These include (but are not limited to):

- People of older age. Older people generally have a slower metabolism and less muscle contraction strength along their digestive tract than when they were younger.
- Being female, especially during and after pregnancy. Changes in hormones make women more prone to constipation.
- Being dehydrated (not drinking enough water).
- Not eating enough high-fibre foods. High-fibre foods keep food moving through the digestive system.
- Living a sedentary lifestyle.
- Taking certain medication which may cause constipation as a side effect, including opioid analgesics such as codeine.
- Having an eating disorder.

Symptoms

Although bowel movement patterns vary from person to person, the longer the time between bowel movements, the more difficult it becomes to pass a stool. The following are signs and symptoms of chronic constipation:

- Passing less than three stools a week
- Stools are hard and dry
- Straining to have bowel movements
- Painful bowel movements as stools are difficult to pass
- Feeling as though bowels have not completely emptied

What happens in the body to cause constipation?

Constipation occurs when the colon absorbs too much water from the stool, which dries it out, making it hard in consistency and difficult to expel from the body.

- During normal digestion: as food moves through the digestive tract, nutrients are absorbed. The partially digested food (waste) that remains moves from the small intestine to the large intestine, also called the colon. The colon absorbs water from this waste, which creates a solid matter called stool.
- If constipated: food may move too slowly through the digestive tract. This gives the colon more time to absorb water from the waste, resulting in the stool becoming dry, hard, and difficult to pass.

Complications of constipation

Complications usually associated with chronic constipation include:

- Haemorrhoids/piles: straining to have a bowel movement may cause swelling in the veins in and around the anus.
- Torn skin in the anus (anal fissure). A large or hard stool can cause tiny tears in the anus.
- Stool that cannot be expelled (faecal impaction). Chronic constipation may cause an accumulation of hardened stool that gets stuck in the intestines.
- Intestine that protrudes from the anus (rectal prolapse). Straining to have a bowel movement can cause a small amount of the rectum to stretch and protrude from the anus.

You are what you eat

Lifestyle intervention is considered the first form of intervention when it comes to a patient with constipation. Patients should be advised to increase their fluid intake and levels of physical activity. It is also recommended that patients add high-fibre foods to their diet, including beans, vegetables, fruits, whole grain cereals and bran. The consumption of processed foods that have low amounts of fibre should be reduced.

Achieving the recommended amount of fibre through diet alone may be difficult for some people. Therefore, if necessary, fibre supplements (bulking agents) should be added to the diet. The natural sugars in fruit have an osmotic effect that may be of benefit. In particular, a study found that prunes can significantly improve spontaneous bowel actions compared to psyllium.

Patients should be advised to attempt defaecation within two hours of waking up, half an hour after breakfast, when colonic motility is strongest. They should also be encouraged to establish a routine – same time, same place – and to ‘heed nature’s call’ immediately.

Treating constipation with laxatives

Many patients turn to laxatives when they do not have a regular bowel movement each day. This often leads to excessive use of laxatives or ‘laxative abuse’. Laxative abuse may lead to complications such as low potassium levels in the body (hypokalaemia) and damage to the colon.

Bulking agents

Ispaghula (psyllium), sterculia and methylcellulose are examples of bulking agents (fibre replacement products) which are considered the first-line of treatment of constipation. These agents are soluble fibre supplements that retain water to increase stool mass, which stimulates the movement of stool in the colon. It takes about two to three days for patients to notice a difference. Side effects from these agents include gas, bloating and cramps, particularly in patients with irritable bowel syndrome. To reduce the risk of gas and cramping, it is recommended to slowly increase the dose of a bulking agent and to always take it with plenty of water. Bulking agents are non-habit-forming and may be used as supplements to dietary fibre.

Bulking agents containing sodium should be used with caution in patients with hypertension or other conditions that may be aggravated by fluid and water retention. These agents may interfere with the absorption of certain medications, e.g. digoxin, lithium, carbamazepine and anti-diabetic agents.

Osmotic laxatives

Osmotic laxatives may also be used as first-line therapy and may be used concurrently with bulking agents. Polyethylene glycol (PEG) is the most commonly used osmotic laxative and may be preferred in some patients since it does not cause gas or bloating. It is indicated for relief of occasional constipation and generally produces a bowel movement in one to three days. Other commonly used examples of osmotic laxatives include sorbitol and lactulose. These laxatives are poorly soluble sugars that draw water into the colon, aiding the movement of the stool through the colon, facilitating its passage.

Stimulant laxatives

Bisacodyl and senna are examples of stimulant laxatives because they stimulate peristalsis in the colon, speeding the movement of stool in the colon, i.e. ‘forces’ the stool out. These agents are only recommended for short-term use since they can cause chronic changes in the colon and may also lead to dependency. Repeated misuse of stimulant laxatives may result in excessive water and electrolyte loss, resulting in medical complications.

Senna or bisacodyl should be used only if patients do not respond to bulking agents, and should be restricted to short-term use.

Stool softeners

Glycerine suppositories and liquid paraffin are stool softeners. Glycerine suppositories are useful as an adjunct to other laxative agents. Liquid paraffin, widely used by patients, should be avoided as it may cause anal seepage, anal irritation and possible fat-soluble vitamin malabsorption.

When to see a doctor?

Patients should be advised to see their doctor if:

- Constipation is a new problem.
- There is blood in their stool.
- They experience abdominal pain, nausea and/or vomiting.
- They are losing weight unintentionally.
- Suffering from severe pain with bowel movements.
- Constipation has lasted more than three weeks.

Conclusion

Patients often consult at their pharmacy for assistance with gastric and digestive complaints. One of the most common complaints is constipation. Certain medical conditions preclude the use of certain types of laxatives. Therefore, a general overview of the patient’s medical history is essential before recommending a laxative. Equally important is to recognise the warning signs warranting a referral to the doctor.

Bibliography

- Constipation. Available from: <https://www.mayoclinic.org/diseases-conditions/constipation/symptoms-causes/syc-20354253>. Accessed 10 Apr 2021.
- Constipation. July 2019. Available from: <https://my.clevelandclinic.org/health/diseases/4059-constipation>. Accessed 10 Apr 2021.
- Constipation. July 2019. Available from: <https://my.clevelandclinic.org/health/diseases/4059-constipation#:~:text=Constipation%20occurs%20when%20bowel%20movements,to%20inadequate%20of%20fiber>. Accessed 10 Apr 2021.
- Pray WS, Pray GE. Counselling patients about constipation. *US Pharm*. 2013;38(12):8-11.
- Rossiter D, editor. *South African medicines formulary (SAMF) 12th ed*. Cape Town: Health and Medical Publishing Group; 2016. p. 32-36.
- Wald A. Patient education: Constipation in adults (beyond the basics). July 2020. Available from: <https://www.uptodate.com/contents/constipation-in-adults-beyond-the-basics#H4>. Accessed 10 Apr 2021.
- Watermeyer G. An approach to the patient with chronic constipation. *deNovo Medica*. 2019. Available from: <https://www.denovomedica.com/cpd-online/wp-content/uploads/An-approach-to-the-patient-with-chronic-constipation.pdf>. Accessed 10 Apr 2021.