

For the Primer, visit [doi:10.1038/nrdp.2017.95](https://doi.org/10.1038/nrdp.2017.95)

➔ Constipation is used to describe a variety of symptoms, including hard stools, excessive straining, infrequent bowel movements, bloating and abdominal pain. Chronic constipation can occur secondary to treatment (such as opioid pain medication), systemic illness (such as Parkinson disease), local pathology (such as colorectal cancer) or, more frequently, can be the result of a primary disturbance of colonic propulsion or rectal emptying.

MECHANISMS

Slow-transit constipation is attributed to a reduced frequency or absence of contractions that normally induce propulsive mass movements in the colon

DIAGNOSIS

Chronic constipation is characterized by the need to strain, presence of hard or lumpy stools, sensation of incomplete evacuation, sensation of anorectal obstruction, the need for manual manoeuvres to facilitate defecation or <3 bowel movements per week. According to the Rome IV diagnostic criteria, ≥2 of these symptoms need to be present for >3 months, in the absence of alarm features (such as blood in the stool or weight loss) that point to organic causes of constipation. To distinguish between the different types of primary chronic constipation, anorectal structure and functional testing (suggesting rectal evacuation disorders) or colonic transit time measurements (suggesting slow-transit constipation) can be used; if no abnormalities are observed, constipation is considered functional.



! Rectal evacuation disorders are caused by the inability to coordinate the abdominal muscles, pelvic floor muscles and the anal sphincter to evacuate stools owing to structural or functional defects. Dyssynergic defecation is the most common evacuation disorder and is caused by functional defects; it is the consequence of, for example, faulty toilet habits, painful defecation and dysfunction of the gut-brain axis.

QUALITY OF LIFE

Chronic constipation has a negative impact on quality of life. Indeed, quality of life of patients with chronic constipation in the

community is similar to those with stable inflammatory bowel disease, chronic allergies and dermatitis, whereas patients

in the clinical setting have a comparable quality of life score to those with active inflammatory bowel disease.

Most patients with chronic constipation do not have evidence of slow colonic transit or rectal evacuation disorders; this type of constipation is called functional constipation

Rx MANAGEMENT

Dietary and lifestyle modifications — such as increased fluid intake, a high-fibre diet and exercise — are often used as first-line management strategies for patients with chronic constipation, followed by over-the-counter osmotic and stimulant laxatives. If no improvement is observed, other pharmacological treatments (such as prosecretory agents and serotonergic agonists) might be considered. For patients with dyssynergic defecation, anorectal biofeedback therapy (a behavioural training technique) is recommended. Surgery is controversial, and should only be considered in selected patients with slow-transit constipation.



EPIDEMIOLOGY

The global prevalence of constipation varies between 7–14%, depending on the definition used. The prevalence is twofold higher in women than in men and tends to increase with age. Symptoms of chronic constipation overlap with those attributed to other disorders such as irritable bowel syndrome. In addition, mood disorders such as depression are more prevalent in patients with chronic constipation than in the general population.

Whether chronic constipation is associated with an increased risk of developing colorectal cancer is controversial