



# Constipated?

Well, the long wait is over

by Dr Mark Wong

**EVERYONE EXPERIENCES CONSTIPATION** at some point in their lives. Constipation is a symptom and not a disease in itself. One does not need to have daily bowel movements to be normal, as patterns and habits vary from person to person.

Constipation occurs when bowel movements become difficult or less frequent than usual. In general, when movements stop for more than three days, the stools become harder and more difficult to pass. Patients may experience abdominal bloating, cramping pain, or even vomiting. Although definitions vary, one is considered constipated if there are two or fewer bowel movements in a week, or if one has two or more of the following symptoms for at least three months:

- Straining during a bowel movement more than 25% of the time
- Hard stools more than 25% of the time
- Incomplete evacuation more than 25% of the time

## How prevalent is constipation?

Constipation is one of the most common digestive complaints worldwide. Though not usually serious, it can nonetheless be uncomfortable and frustrating. In the USA alone, constipation affects 2% of the adult population, accounting for up to 2.5 million doctor visits annually and medication costs worth millions of dollars.

A local study published in the *Singapore Medical Journal* in 2000 quoted a local prevalence of about 7.3% in those aged 16 years and above.

## What causes constipation?

There are numerous causes of constipation, and it is not always possible to identify a definite cause in each patient. Fortunately, the vast majority of patients can be managed conservatively, and the doctor's role is to identify more serious causes that might require surgical treatment, such as colorectal cancer.

Causes may include:

- Dietary disturbances (inadequate water intake, too little or too much dietary fibre, disruption of regular diet or routine)
- Inadequate activity/exercise or immobility
- Excessive/unaccustomed stress

- ☑ Medical conditions such as hormonal (hypothyroidism), neurological (stroke, Parkinson's disease), depression, eating disorders
- ☑ Medications (antacids containing calcium or aluminium, strong pain medicines like narcotics, anti-depressants, iron pills)
- ☑ Pregnancy
- ☑ Colorectal cancer

## How is constipation investigated?

Most people do not need extensive testing, although some might have a more serious underlying problem that warrant further investigations. Symptoms that could point to a more serious cause like colorectal cancer that warrant early attention include the following:

- ☑ Your constipation is a new and persistent problem and lasting more than two weeks.
- ☑ You have blood and/or mucus in your stools.
- ☑ You are losing weight even though you are not dieting.
- ☑ Your bowel movements are associated with severe pain.
- ☑ You are more than 50 years of age with a family history of colorectal cancer.

Tests your doctor may perform to diagnose the cause of your constipation include:

- ☑ Blood tests if a hormonal imbalance is suspected
- ☑ Scopes (colonoscopy) or imaging (CT-colonography or barium enema) to exclude colorectal cancer

## Functional constipation: The silent culprit!

A large proportion (up to 30%) of patients with constipation do not have any obvious underlying illness to explain their symptoms and classically become chronically dependent on laxatives. In fact, they could actually be suffering from one of two types of functional constipation:

**Colonic inertia.** This is a condition characterised by a lack of urge to open bowels, resulting in very infrequent bowel habits (sometimes only one to two times per week). This is due to poor colonic contractions resulting in the retention of stools.

**Obstructed defecation.** This is a condition where there is usually an urge but a person has to strain excessively during bowel movements. This may be due to a lack of coordinated anal muscle contractions or structural problems like rectal prolapse or a combination of both.

These problems are often under-diagnosed, difficult to manage, or mismanaged due to a lack of understanding of these subset of conditions. As a result, such patients seldom get better or cope with life-long laxatives, and their quality

of life can be severely affected. Furthermore, functional constipation may be part of a more complex pelvic floor disorder, particularly in women, who can also experience urinary difficulties or pelvic organ prolapse at the same time.

As such, it is crucial that once life-threatening causes like cancer are excluded, persistent constipation should be appropriately investigated and managed until symptoms improve.

The specialised tests needed to identify and differentiate these types of constipation are available at the Singapore General Hospital (SGH), and these include:

- ☑ **Transit marker study.** A capsule containing markers is swallowed and an X-ray is taken five days later; the number and distribution of these markers along the colon and rectum give a clue to the kind of constipation present.
- ☑ **Anorectal manometry.** This involves testing the pressures and reflexes of the anus and rectum to detect any incoordination that could be contributing to constipation.
- ☑ **Defecography.** An X-ray/magnetic resonance imaging (MRI) evaluates the actual movements of the colon and rectum during bowel movements to look for any prolapse or incoordination.

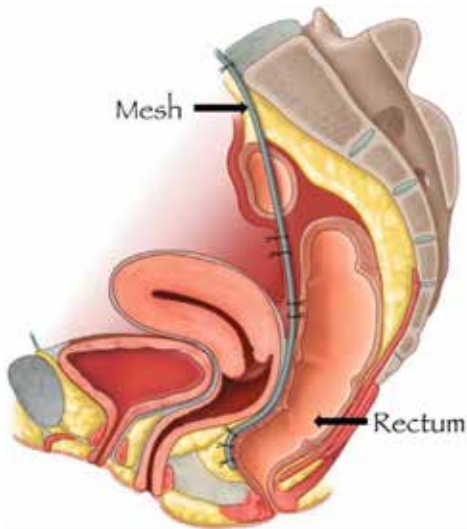
## What are the treatment options available?

Treatment has to be individualised and depends on the cause and severity of constipation. Whenever possible, treatment is directed at the underlying disease (e.g. thyroid hormones for hypothyroidism, surgery for colorectal cancer). When treating constipation, the goal is to achieve at least one bowel movement every one to three days without straining.

Treatment begins with dietary advice to moderate fibre intake and ensure adequate fluid intake. Exercise is also important. Laxatives are also useful and should be tailored for each patient.

## Different types of Laxatives

- ☑ **Osmotic laxatives.** These work by preventing the body from removing water from the stools so they remain soft. They draw water out from the body and into the colon, so the water softens the stools.
- ☑ **Bulk-forming agents laxatives.** These are granules or powders that are taken orally. They help the stools to retain water, bulk up and stimulate intestinal muscle action.
- ☑ **Stimulant laxatives.** These stimulate the colon quickly to promote bowel movements. But they are usually used only as a last resort. Continuous use may cause the colon to weaken to the point where the colon may not work properly without laxatives.



**Figure 1. Rectopexy for rectal prolapse (with inserted mesh in front of rectum)**

For functional causes mentioned above, more than one type of treatment may be required to achieve the best outcomes, as defecation (passing stools) relies on a complex chain of events. Fortunately, the majority of patients will benefit from conservative measures such as dietary modification, tailored medical therapy, and pelvic floor rehabilitation. However, when the above measures fail, surgery may offer relief of symptoms and improvement in quality of life.

### Specialised Treatment Options Offered at SGH

- ☑ **Pelvic floor rehabilitation exercises (anorectal biofeedback).** This is done to re-train the anal muscles to contract effectively in the presence of dis-coordinated movements.
- ☑ **Surgical repair of rectal prolapse.** This surgery (rectopexy) involves inserting a mesh (or flexible plastic scaffolding) to lift and support the weakened supports of the rectum and pelvic floor muscles and can also be performed using laparoscopy or with robotic-assistance (Figure 1).
- ☑ **Surgical removal of the colon.** This is now rarely used as a last resort in severe cases of colonic inertia. eh



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