

Irritable bowel syndrome



Irritable bowel syndrome (IBS) is a common disorder that affects the large intestine (colon). Irritable bowel syndrome commonly causes cramping, abdominal pain, bloating, gas, diarrhea and constipation. IBS is a chronic condition that you will need to manage long term.

Only a small number of people with irritable bowel syndrome have severe signs and symptoms. Some people can control their symptoms by managing diet, lifestyle and stress. Others will need medication and counseling.

Causes

While the cause of IBS is unknown, a disruption of the brain-gut axis and small intestinal bacterial overgrowth are thought to be important factors. The risk of developing IBS increases six-fold after acute gastrointestinal infection. Postinfection, further risk factors are young age, prolonged fever, anxiety, and depression. Antibiotic use also appears to increase the risk of developing IBS.

- Approximately 10 percent of IBS cases are triggered by an acute gastroenteritis infection. Genetic defects relating to the innate immune system and epithelial barrier as well as high stress and anxiety levels appear from evidence to increase the risk of developing post-infectious IBS. Post-infectious IBS usually manifests itself as the diarrhea predominant subtype. Evidence has demonstrated that the release of high levels of proinflammatory cytokines during acute enteric infection causes increased gut permeability leading to translocation of the commensal bacteria across the epithelial barrier resulting in significant damage to local tissues which is likely to result in chronic gut abnormalities in sensitive individuals. However, increased gut permeability is strongly associated with IBS regardless of whether IBS was initiated by an infection or not.

- Stress can also be one of the major reasons for IBS. Given the high levels of anxiety seen in IBS patients and the overlap with conditions such as fibromyalgia and chronic fatigue syndrome, a potential model of IBS involves a disruption of the stress system. The stress response in the body involves the HPA axis and the sympathetic nervous system, both of which have been shown to operate abnormally in IBS patients. Psychiatric illness or anxiety precedes IBS symptoms in two-thirds of patients, and psychological traits predispose previously healthy people to developing IBS after gastroenteritis.

- The bacterial growth in small intestine can also be stated as the reason for IBS.

Symptoms

- Pain and discomfort may occur in different parts of the tummy (abdomen). Pain usually comes and goes. The length of each bout of pain can vary greatly. The pain often eases when you pass stools (faeces) or wind. Many people with IBS describe the pain as a spasm or colic. The severity of the pain can vary from mild to severe, both from person to person, and from time to time in the same person.
- Bloating and swelling of your abdomen may develop from time to time. You may pass more wind than usual.
- Changes in stools
- Some people have bouts of diarrhoea, and some have bouts of constipation.
- Some people have bouts of diarrhoea that alternate with bouts of constipation.
- Sometimes the stools become small and pellet-like. Sometimes the stools become watery or more loose. At times, mucus may be mixed with the stools.
- There may have a feeling of not emptying the back passage (rectum) after going to the toilet.
- Some people have urgency, which means they have to get to the toilet quickly. A morning rush is common. That is, they feel an urgent need to go to the toilet several times shortly after getting up. This is often during and after breakfast.

Other symptoms can also include:

- Feeling sick (nausea).
- Headache.
- Poor appetite.
- Tiredness.
- Backache.
- Muscle pains.
- Feeling quickly full after eating.
- Heartburn
- Bladder symptoms (an associated irritable bladder).

Some people have occasional mild symptoms. Others have unpleasant symptoms for long periods. Many people fall somewhere in between, with flare-ups of symptoms from time to time. Some doctors group people with IBS into one of three categories:

- Those with abdominal pain or discomfort, and the other symptoms are mainly bloating and constipation.

- Those with abdominal pain or discomfort, and the other symptoms are mainly urgency to get to the toilet, and diarrhoea.
- Those who alternate between constipation and diarrhoea.

Diagnosis

- Full blood count (FBC) - to rule out lack of iron in the blood (anaemia), which is associated with various gut disorders.
- Erythrocyte sedimentation rate (ESR) or C-reactive protein (CRP) - which can show if there is inflammation in the body (which does not occur with IBS).
- A blood test for coeliac disease.
- In women, a blood test to rule out cancer of the ovary, called CA-125.
- A stool test to look for a protein called faecal calprotectin. This may be present if you have Crohn's disease or ulcerative colitis, but is not present in IBS.

More complicated tests such as gastroscopy(a look into the bowel with a special telescope) are not usually needed. However, they may be done if symptoms are not typical, or if you develop symptoms of IBS in later life (over the age of about 50) when other conditions need to be ruled out.

Treatment

There are many different treatments that may be tried for IBS. All will have an effect on some people, but none will help in every person with IBS. No treatment is likely to take away symptoms completely, but treatment can often ease symptoms and improve your quality of life. If symptoms are more troublesome or frequent, one or more of the following treatment options may be advised:

1. Lifestyle changes:

- Exercise. Regular exercise is known to help to ease symptoms.
- Managing stress levels. Stress and other emotional factors may trigger symptoms in some people. So, anything that can reduce your level of stress or emotional upset may help.
- Keeping a symptom diary. It may help to keep a food and lifestyle diary for 2-4 weeks to monitor symptoms and activities. Note everything that you eat and drink, times that you were stressed, and when you took any formal exercise. This may identify triggers, such as a food, alcohol, or emotional stresses, and may show if exercise helps to ease or to prevent symptoms. If you are advised to try a particular treatment, it may be sensible to keep a symptom diary before and after the start of the treatment. For example, before changing the amount of fibre that you eat, or taking a probiotic (explained later), or starting

medication. You may wish to jot down in the diary the type and severity of symptoms that you have each day for a week or so. Keep the diary going after you start treatment. You can then assess whether a treatment has improved your symptoms or not.

2. Diet control

- Have regular meals and take time to eat at a leisurely pace.
- Avoid missing meals or leaving long gaps between eating.
- Drink at least eight cups of fluid per day, especially water or other non-caffeinated drinks. This helps to keep the stools (faeces) soft and easy to pass along the gut.
- Restrict tea and coffee to three cups per day (as caffeine may be a factor in some people).
- Restrict the amount of fizzy drinks that you have to a minimum.
- Don't drink too much alcohol. (Some people report an improvement in symptoms when they cut down from drinking a lot of alcohol.)
- Consider limiting intake of high-fibre food (but see the section above where an increase may help in some cases).
- Limit fresh fruit to three portions (of 80 g each) per day.
- If you have diarrhoea, avoid sorbitol, an artificial sweetener found in sugar-free sweets (including chewing gum) and in drinks, and in some diabetic and slimming products.
- If you have a lot of wind and bloating, consider increasing your intake of oats (for example, oat-based breakfast cereal or porridge) and linseeds (up to one tablespoon per day). You can buy linseeds from health food shops.

3. Probiotics

Probiotics are nutritional supplements that contain good germs (bacteria). That is, bacteria that normally live in the gut and seem to be beneficial. Taking probiotics may increase the good bacteria in the gut which may help to ward off bad bacteria that may have some effect on causing IBS symptoms. You can buy probiotic capsules (various brands) from pharmacies. The dose is on the product label. You can also buy foods that contain probiotic bacteria. These include certain milk drinks, yoghurts, cheeses, frozen yoghurts, and ice creams. They may be labelled as 'probiotic', 'containing bacterial cultures' or 'containing live bacteria'.

4. Medication

- Rifaximin is an antibiotic but mainly stays in the gut and very little is absorbed into the body. The theory is that it may kill some germs (bacteria) in the gut that may have some role in IBS. It is taken for two weeks. Further research is needed to clarify its role in IBS.

- A medicine called tegaserod seems to be useful for people with constipation.
- Studies have shown that certain Chinese herbal medicines may help to ease symptoms in some cases. However, results vary. So more research is needed to clarify their safety and usefulness.
- Newer medicines that affect certain functions of the gut are also being developed and may become useful treatments in the future.

Reference

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