

Irritable bowel syndrome (IBS)

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Story of a patient

Mrs L is a 42-year old working mother of three children who has been experiencing central abdominal pain and bloating from time to time in the past 3 years. Her symptoms are usually worse after meals, especially if the food is oily. Pain used to get relieved after passing stools. She did not lose weight. She did not observe blood in her stools. In the past she had consulted numerous doctors, had numerous blood tests, ultrasound scan of the abdomen and an endoscopic assessment of the stomach. Two years ago she had surgery to remove her gallbladder when a gallstone was found on the ultrasound scan. Although not severely constipated, she would experience difficulty in clearing

her bowels completely. Recently she underwent colonoscopy, and after this proved to be normal, her doctor gave her a diagnosis of irritable bowel syndrome.

What is IBS?

IBS is a condition where the patient experiences abdominal pain or discomfort that arises from either the small or large intestines in the absence of significant disease in these areas. The pain or discomfort may be located anywhere in the abdomen including the upper abdomen and gastric region. Other symptoms associated with IBS include bloating, loose motions, constipation and incomplete bowel movements. As the symptoms of IBS overlap with those of other intestinal diseases such as colitis,

diverticular disease, stomach ulcers and even cancers of the digestive system, it is important to consider these before making a diagnosis.

What tests are required to make a diagnosis?

As there is no specific test for IBS, tests are usually carried out to exclude intestinal diseases such as those mentioned above. These tests comprise blood tests, stool examination and either a colonoscopy or a barium enema. In people over the age of 45, in those with alarm symptoms such as weight loss, blood in the stools or fever, and people with a family history of bowel cancer, it is important to have these tests before making a diagnosis of IBS. However, if the patient is young and healthy, and has been experiencing these symptoms for a year or longer without any signs of deteriorating health such as weight loss

and anaemia, it is not always necessary to undertake any tests.

How common is it and who is at risk?

Estimates from around the world suggest that 5-20% of the population have IBS. In a recent study from Mumbai the prevalence was estimated to be 7.5%. Young adults between ages of 20 and 40 years appear to be most at risk. Although in the west women appear to be more prone to IBS than men, in Asian communities men and women appear to be equally at risk.

What are the symptoms of IBS?

All the above symptoms are not exclusive to IBS and it is important to check with a doctor first before assuming that they are due to IBS. A patient does not require all the symptoms to be present all the time for a diagnosis of IBS.

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- Crampy abdominal pain, often relieved by defecation and / or passage of flatus
- Alteration in bowel habit (diarrhea, constipation or alternating)
- Bloating and (painful) swelling of the abdomen
- Rumbling noises (borborygmi) and excessive passage of wind
- Increased gastro-colic reflex, this is an awakening of the childhood reflex where food in the stomach stimulates colonic activity, resulting in the need to open the bowels.
- Urgency - a need to rush to the toilet and incontinence (if a toilet isn't nearby)
- A sharp pain felt low down inside the rectum (proctalgia fugax)
- Right-sided abdominal pain, either low or under the right lower ribs which does not always get better on opening the bowels; or pain under the left ribs (splenic flexure syndrome) and when the pain is bad it may ascend to the left armpit.
- Sensation of incomplete bowel movement
- Mucus with stool

Other symptoms that are frequently associated include: indigestion, belching, nausea, headaches, dizziness, ringing in the ears, fibromyalgia, backache, passing urine frequently, tiredness or even chronic fatigue, shortness of breath, anxiety and depression

Why do people get IBS?

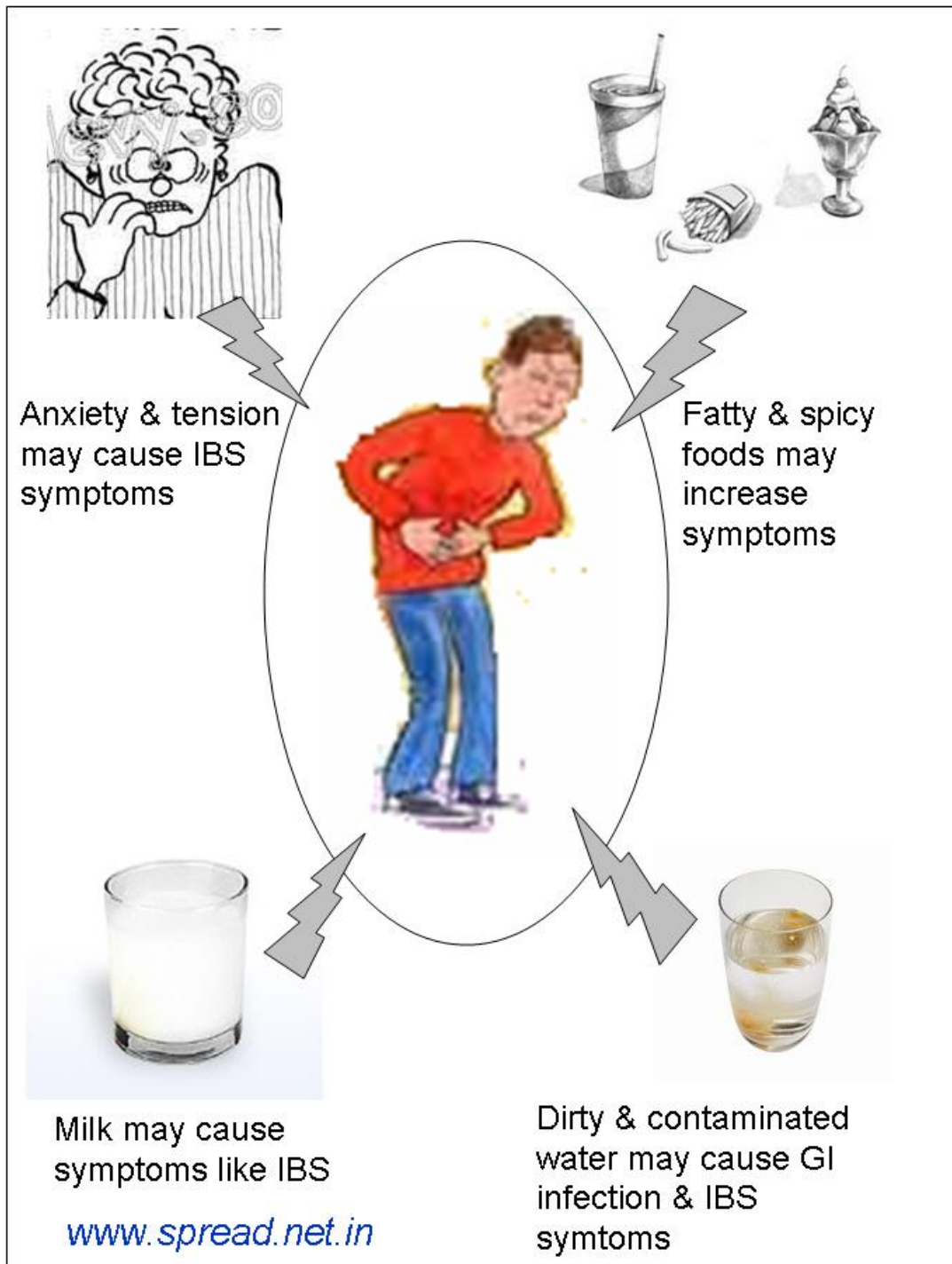
People may develop IBS for a number of reasons including food poisoning and repeated or prolonged use of antibiotics. People who have recently been through

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an emotional life event and those who worry easily over various symptoms also appear to be more prone to developing IBS. In the past, IBS was frequently

blamed on the lack of fibre in the diet. However, dietary assessments usually show that IBS patients consume similar levels of fibre as people without IBS.

Fig. 1. Factors increasing symptoms of IBS



Some patients with IBS however, appear to be intolerant of dairy products and certain grains such as wheat. Alcohol, coffee, oily food and spices may aggravate IBS symptoms. People with IBS may also experience worsening of their symptoms in times of stress, when they lack sleep, and during the menstrual period.

Relationship with stress and life style factors

Symptoms of IBS many wax and wane over period of time. For example, a very serious examination, problems at work place, difficult times in family life, and even a happy event, such as getting married or receiving a promotion can make anyone's bowels behave differently, perhaps making underlying IBS symptoms worse. Fig. 1 shows factors, which increase symptoms of IBS. Patients must pay attention to these factors as relieving these factors are no

less important than drugs for treatment of IBS.

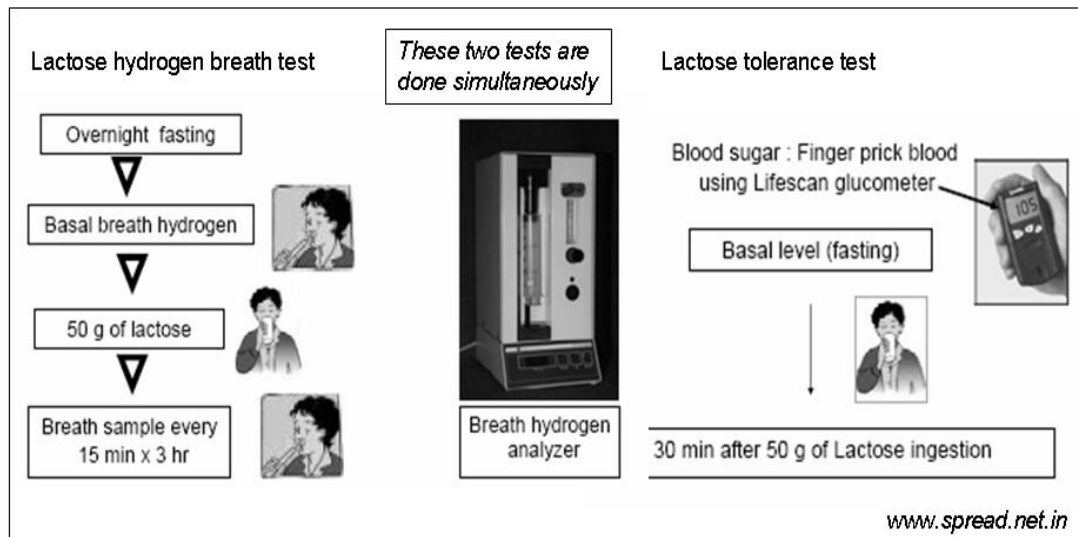
There are many ways to cope with stress. Here are some suggestions that can help you get started.

- Practice Relaxation Exercises.
- Breathe.
- Meditate or pray.
- Examine your beliefs and attitudes.
- Develop your sense of humor.
- Make time for your hobbies.
- Exercise.

Is there any relationship between milk ingestion and symptoms of IBS?

Many patients with IBS experience increase in symptoms of IBS while on milk. This is due to intolerance to lactose, the principal sugar component of milk. Lactose is a chemical substance which contains glucose and galactose. In human small intestine, lactose is

Fig. 2. Methods of testing for lactose (major constituent of milk) intolerance.



supposed to be broken down into its components (glucose and galactose) by an enzyme called lactase. Though lactase is present in the small bowel in adequate quantity in most infants, many of us lose this enzyme during adulthood. In these individuals, lactose is not broken down to glucose and galactose by lactase; therefore, undigested lactose is fermented by the bacteria residing inside the intestine, which produce gases like hydrogen and methane.

This leads to development of symptoms such as bloating, flatulence, diarrhea and constipation. If you experience increase in symptoms with milk, it is good practice to stop all milk and milk products for a few weeks and see if symptoms of IBS decreases significantly. If so, it is advisable to stop milk and milk containing foods for sometimes according to advice of doctor. Following this, the patient can reintroduce a measured amount for example half a

glass of milk with food, and increase gradually until symptoms reoccur. In this way a patient is able to determine his or her threshold. If you want to be sure whether you have lactose intolerance or not before undertaking life-long dietary modification such as complete avoidance of milk and milk products, you may ask your doctor to get lactose hydrogen breath test or lactose tolerance test done. This is a simple and cheap test on your breath air or blood. However, it may not be widely available and hence, you need to go to a tertiary referral centre to get this test done.

Sometimes symptoms of IBS might respond to treatment with metronidazole tablet, what does it mean?

You might have experienced short-lasting improvement in your symptoms after treatment with metronidazole. Though metronidazole is useful in

treatment of amebiasis, this improvement is not related to treatment of amebiasis but may be related to killing of bad bacteria in excess of normal in your intestine, which is known as small bowel bacterial overgrowth. If you have experienced such response to treatment with metronidazole, it is advisable to get yourself tested for small bowel bacterial overgrowth using glucose hydrogen breath test before you take treatment with antibiotics to kill these bad bugs. To know more about breath test, you may go through preparation of motility and breath tests chapter in this website.

How is IBS treated?

Contrary to what many doctors and patients think, IBS can be effectively treated. Results from various centres report major improvement in symptoms in as many as 85% of patients within 6 months of treatment. For the majority of

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patients there is no requirement for elaborate tests, restrictive diets, or treatment with a large number of medications. Treatment usually consists of a combination of simple diet and lifestyle adjustments, together with 2 or 3 medications to be taken for 6-12 weeks. The type of medications used to treat IBS will be determined by the type of symptoms bothering the patient. For example, antispasmodics are used to treat abdominal pain, prokinetics are used to treat constipation and bloating, and anti-diarrhoeal agents are used to treat diarrhoea. The use of a low dose anti-depressant medication can be very effective for pain even in the absence of depression.

The use of fibre supplement such as ispaghula or psyllium may help to soften stool in constipation, but cereal fibre such as bran could aggravate bloating in some patients. Patients who develop

abdominal pain and urge for bowel movement after coffee, oily and spicy foods should avoid or reduce the intake of these substances.

It is important to pay attention to the effects of stress and lifestyle factors. Patients should set aside enough time in the morning for breakfast and bowel movement, and to be on time for their afternoon and evening meals. Patients should also ensure that they get enough rest, and in particular get a good night's rest. Anxiety will often aggravate symptoms such as diarrhoea and abdominal pain. Patients should examine the underlying reasons for anxiety, and discuss these with a close friend, family member or counsellor. Regular exercises and relaxation techniques such as yoga and meditation can help a patient to cope better with stress.

Experience and studies suggest that good results are achieved when the doctor

takes a compassionate interest in the patient and is able to provide a clear explanation of the condition and the requirements of treatment. Simply telling patients that there is nothing wrong with them and dismissing their condition as a consequence of stress, does not help.

Surgical treatment is not indicated for IBS, and it is important to be aware that IBS patients often do worse after surgery than patients without IBS. Patients should be aware that just because gallstones are found it does not necessarily mean that symptoms like upper abdominal pain, bloating and

flatulence are due to the gallstones. In fact, the majority of people with gallstones will never experience any symptoms. Female patients should also be careful not to jump to the conclusion that they have a disease in the pelvis when they experience pain in the lower abdomen. As adhesions, cysts, endometriosis and fibroids in the pelvis frequently do not cause any discomfort or pain, women should pay particular attention to any changes in their bowel pattern as this could be an indicator that the pelvic pain is from the bowel and could be due to IBS.