

Irritable Bowel Syndrome (IBS)

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Introduction

Irritable bowel syndrome or IBS is very common in the population and comprises roughly 30% of those attending a gastroenterology outpatient department. IBS is in a sense a descriptive term for “my gut is not happy”. The gut has a limited way to show its discomfort - pain, diarrhoea, constipation, wind and bloating being its main vocabulary.

The syndrome can be divided into a number of clinical groups; post gastroenteritis, predominant constipation, mainly diarrhoea and alternating diarrhoea and constipation. Symptoms that are not typical in IBS patients are pain at night, fever, diarrhoea that gets you out of bed at night, blood in the stools and unexplained weight loss. If these symptoms are present, seeing a doctor without delay is important.

IBS is called a ‘functional disease’ because there is no obvious associated disease. There is no abnormality seen when the patient has a colonoscopy and the blood tests are usually normal.

The causes of IBS

The fact that no damage has been seen in the colon when looked at under the microscope and that all blood tests, often including tests for allergy, are normal has led many doctors to view IBS as a psychological problem.

However, when the lining of the gut is examined more closely, there are signs of mild inflammation in a proportion of patients. Some of the cells in the lining have been identified as mast cells – the cell that is involved in allergic reactions thus implicating food hypersensitivity as a possible cause of symptoms. Other researchers view the symptoms as evidence of a disturbance in the balance of bacteria and yeasts in the gut. Some symptoms such as wind and bloating would suggest a form of gut fermentation. Pain is a prominent feature in some patients and this may mean that there is an abnormality in the way nerve impulses are interpreted in the brain.

The success of elimination diets in IBS

This has been a much neglected aspect of IBS but of crucial importance. About 1 ton of food and drink is taken into the body each year so the 20 feet of the alimentary tract has to process, digest and absorb all the nutrients that we need for life and health. The gut immune system is the most powerful in the body as

it has to make sure that there is no allergic response to the various foods eaten otherwise there would be havoc! This termed Oral Tolerance.

There is a long history of patients being put on a diet for a variety of diseases such as arthritis, migraine, hyperactivity, Crohn's disease, eczema and of course IBS. Anecdotal reports have shown that eliminating certain common foods can relieve symptoms in IBS but these studies were more or less ignored by mainstream medical specialists because it was felt that IBS was a psychological problem.

An early study was carried out by Prof John Hunter at Addenbrookes Hospital in Cambridge who showed that 70% of patients responded to a standard elimination diet avoiding common foods such as dairy and grains. Studies of this sort have been repeated many times with the same good success rate. One study in particular by Stefanini and colleagues in Italy looked at IBS patients who had predominant diarrhoea. They showed that almost 70% of the patients responded to an elimination diet and in a cross over study, a similar percentage were helped by taking oral Sodium Cromoglycate – a drug which blocks allergic reactions by inhibiting histamine release from mast cells. This is good evidence that an allergic reaction can take place in the lining of the gut.

Gut bacteria and yeasts in IBS

Involvement of bacteria: A further study by Prof John Hunter showed that IBS was more common in patients who took a course of antibiotics after their operation than those that did not. The wind and bloating occurring in these patients suggested a form of fermentation in the small bowel – small intestinal bacterial overgrowth (SIBO). Testing for this condition is simple – drinking a sugar (lactulose) which is digested by bacteria but not by humans. If there are bacteria in the small bowel the digestion produces gas – hydrogen- which can be measured in the breath. This condition can be treated with antibiotics to good effect.

Involvement of yeasts: This is a more controversial area but one which has been pursued in the USA for many years. Diets eliminating sugar and yeasts seem to help many patients not only with IBS but who have multiple other symptoms such as water retention, headaches, sinus pain, rhinitis, nausea, flushing, fatigue, aching joints, pre-menstrual syndrome and possibly vaginal thrush. Such patients with 'too many symptoms' often go from doctor to doctor trying to find relief from their symptoms. The resulting 'thick-note' patient is frequently viewed as a psychological problem when a diet eliminating sugar and yeast products together with anti-yeast medication can be very helpful in relieving their symptoms.

What not to miss

Patients with coeliac disease and IBS are similar in some ways with altered bowel habits and if the patient is anaemic as well, it is important to exclude gluten sensitivity as a cause of the symptoms.

Does an apple a day keep the doctor away? The oral allergy syndrome?

People with seasonal hay fever are sensitized to pollens from grass and trees. The main culprit pollen protein, especially from silver birch pollen, is also found in many fruits and vegetables. Up to 50% of hay fever patients find that eating apples makes their mouth tingle – as it were ‘hay fever of the mouth’. Apples and stone fruit contain this allergen which can also lead to symptoms 24 hours later. These delayed symptoms may consist of abdominal pain with wind and diarrhoea or eczema due to a different allergen in apples which is not destroyed by heating.

The message

Irritable bowel syndrome has been a difficult area for both doctors and patients. There has been a problem in diagnosis because of the lack of abnormalities in biopsies and no abnormal blood tests – and still the patients complains of symptoms! A frustrating situation for both patient and doctor.

This situation is now changing because of the greater understanding of all the aspects that are explained in this review. Many clinical studies show that up to three quarters of patients can be made to feel significantly better by a change in diet and attending to changes in the gut microflora. Hopefully blood tests to diagnose many of the aspects will be available in the future.