
What is irritable bowel syndrome?

1

There is no simple test for irritable bowel syndrome. This chapter focuses on the symptoms that can lead to irritable bowel syndrome being diagnosed.

I am at a party making polite conversation with someone I've never met before; they ask what I do and I tell them I work in the field of IBS. Once the inevitable jokes are out of the way, I guarantee that they will either have it themselves or know someone who does. I've started to tell people I'm a train driver.

Here is Joanna's story. It's typical of the people I meet and treat with irritable bowel syndrome.

“Well I think it really started when I got ‘Montezuma's revenge’ on holiday in the Canary Islands about 6 years ago.

I was only 19 and it was my first real holiday without the parents. After that my bowel movements have never really returned to normal, I mean they are always fairly loose and runny, if you know what I mean!

But the thing I hate most is the bloating, I think I retain water really easily. Since then it comes and goes but I think overall it's getting worse.

It's embarrassing and often gets me down.

I did go to my doctor about 2 years ago and she did various blood tests but they could not find anything.

Lucy (a close friend) told me it might be a food allergy and so I cut out all wheat for a while but apart from losing a couple of pounds ... it didn't seem to help that much with the bloating or going to the toilet.”

Joanna's story highlights many of the key features that make up irritable bowel syndrome (we will call it IBS from now on).

If you were to ask 100 specialists from 10 countries for a definition of IBS (say for the television programme *Family Fortunes*) you would find significant differences between them. Ask them again 10 years later and, as well as the differences between them, many answers will have changed. This is because we

are still learning exactly what IBS is and how best to identify it. At present it is a condition identified by the symptoms. These symptoms include pain, bloating or discomfort in the abdomen and a mixture of diarrhoea and constipation. In IBS people will experience these symptoms but we have yet to find any disease or abnormality in the body to explain it.

We know IBS is very common. In industrialised countries it affects around one in six of us. That's about a dozen people in every street!

IBS will affect people in vastly different ways. Some people will only occasionally experience symptoms, while for others the pain, diarrhoea and constipation are so severe that it becomes distressing, and affects many areas of life. It is not life-threatening, but there are times it can feel like it!

What are the signs and symptoms of IBS?

Box 1. The four main symptoms of IBS.

1. Abdominal pains: stomach pains.
2. Bloating: stomach swelling or a feeling that your stomach is bloated.
3. Diarrhoea.
4. Constipation.

There are four main symptoms of IBS, abdominal pain, diarrhoea, constipation and bloating. Other symptoms frequently found include mucus stools, increased wind, nausea and belching.

These symptoms can vary in frequency and intensity from person to person and within an individual person from day-to-day, and from month to month. Not knowing what will happen tomorrow is part of the frustrating nature of IBS:

“One day it's diarrhoea and the next I can't go at all, it's the stomach pain that's the worse thing.”

“I can go to the loo up to 40 times in one day, the next day I may not go at all, it can really get me down.”

“When I wake up I think, 'Will I have a fat day or a thin day?'”

Let's look at the symptoms in more detail.

1. Pain in the abdomen

For many people abdominal pains are the most unpleasant symptom. People describe the pain in different ways; it is frequently described as coming in spasms (spasmodic); it may be nagging, sharp, heavy or dull:

“I get waves of intense pain. It feels a bit like trapped wind.”

It can be felt anywhere in the abdominal area (just below the stomach) but is more frequent down the left-hand side. The severity of this pain is the one thing most likely to drive people into seeing a doctor. Some people will describe them as ‘stomach pains’ even though these pains tend to occur in the abdomen:

“Sometimes I’m in so much pain that I can’t even sit on the toilet.”

“It feels like I have been cut in two.”

“I can cope with the diarrhoea, but the pain wears me down.”

People may worry about what the pain may mean:

“The cramps can be so bad it can’t just be IBS, it must be something more serious.”

But other people will not experience pain but rather a ‘discomfort’:

“It’s not that painful, but it is a nagging feeling.”

Some women have found that the pains are worse prior to and during menstruation:

“I just know it’s going to be worse with my periods.”

Abdominal pain is often but not always relieved by passing a stool or passing wind.

2. Bloating

Bloating or abdominal distension is common and, although for most people it is not the most severe aspect of IBS, it can be embarrassing and a nuisance:

“My stomach sticks out so far that it looks like I’m pregnant. It is so embarrassing.”

“I spend most of my time in tracksuits to cover it up.”

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“My boyfriend wants to go out all the time and I have to make excuses as I don't want to go out when I'm bloated.”

“It makes me feel ugly.”

“I swear sometimes I can see it growing.”

When people have been asked about bloating, they describe a very similar pattern. People find that the mornings are generally good but their abdomens will gradually distend or bloat throughout the day. By the evenings the bloating can become so bad that tight clothes such as jeans no longer fit.

Some people also find that eating will bring on the bloating:

“I know eating at lunchtime will bring on the bloating, so if I have to go out in the evening I will skip lunch altogether.”

Others swear that specific foods are responsible:

“I know it sounds weird but fruit, especially bananas, seems to make the bloating worse.”

Some doctors were unsure whether the bloating was a 'real symptom' and there was an increase in waist size or whether it was a subjective feeling in that people felt tightness but there was no actual waist expansion. It has now been demonstrated that bloating is associated with an increase in waist size and that this would gradually increase throughout the day, sometimes up to 4 inches!

Abdominal bloating is associated with discomfort, increased wind (flatulence) and rumbling noises (borborygmi):

“I try and avoid meetings at work—I worry that I will pass wind, it really smells bad, it would be so embarrassing.”

“If I relax the wind can be really disgusting ... I avoid sex wherever possible.”

3. Diarrhoea

We have all had diarrhoea at some point in our lives. When our stools are very runny, mushy or watery we know we have diarrhoea. Its one of those words which, along with constipation, everyone understands but is hard to define.

“I thought the world had exploded out of my bottom.”

This is recognised as an episode/attack or bout of diarrhoea. Commonly, but not necessarily exclusively, this attack of diarrhoea will be associated with wanting to use the toilet immediately and more frequently than normal. The urge to go can be very strong and sometimes painful:

“I knew I had to go and I had to go then!”

“There was no warning, I just had to drop everything and go!”

“The feeling was overwhelming, I was so worried I would not make it [to the toilet].”

Some people will experience normal stools at the beginning of the day followed by very loose watery stools, and then regular stools for the rest of the day:

“I can have what I call normal and runny stools in a matter of hours!”

Others will experience an increased bout of going to the toilet but do not pass watery stools; instead they may pass frequent solid stools:

“I go up to 15 times in a morning, but each time I will pass a fairly solid stool.”

This is not diarrhoea. It is still a very common symptom in IBS but different to diarrhoea as the stools are not watery. Some experts have named this phenomenon ‘pseudodiarrhoea’.

4. Constipation

As we have seen with diarrhoea, constipation can be difficult to define but most people will understand what it is:

“I pass very small rabbit poos.”

“I only go about once or twice a week if I’m lucky, and even then it’s very hard and lumpy.”

The main features are small hard lumpy stools and infrequent defecation.

But we know some people have always tended to pass infrequent hard lumpy stools and do not see themselves as constipated; for them that is normal. It may be that they are constipated but they do not know they are and manage to live their lives quite happily without suffering any other symptoms.

In IBS, constipation is often associated with straining, or a feeling you want to go but can't:

“I will sit and strain for up to 30 minutes sometimes. If I'm lucky I'll pass a small amount.”

“I often feel I want to go quite desperately, but when I try and go nothing comes out.”

“It can be very difficult to go!”

Some people have tried to define constipation as occurring when people go less than three times a week. Generally this is a reasonable guide, but it's not definitive. Some people who may go three times one week and four times the next are very likely to still suffer from constipation.

In IBS constipation can be mixed up with the other symptoms:

“I can pass small painful stools in the morning and then normal ones in the evening!”

Some people with IBS may pass small, hard, lumpy stools several times a day and believe they have diarrhoea, where in fact they will have constipation.

Symptoms associated with IBS

1. Mucus stools

The passage of mucus with stools is a fairly common symptom in IBS. People who experience this will describe slimy or watery stools:

“It's like jelly but not quite set!”

It tends to occur more often in patients who experience more constipation and sometimes the mucus stools can be misinterpreted as runny, diarrhoea-type stools.

2. A feeling of incomplete evacuation

“Take yesterday, I had just passed a large stool and yet it still felt there was something left to come out!”

“Most days I feel I should go, even if I have been recently ... But when I try nothing comes out.”

“It’s a feeling like you want to go to the toilet but you can’t, it feels trapped in my guts!”

This feeling is common in IBS. Doctors call it a ‘feeling of incomplete evacuation’. This sensation is a very common symptom associated with IBS. It often leads to a constant awareness of the rectal area and excessive straining:

“I seem to be constantly aware that my bowel is never empty.”

“I will strain for up to 30 minutes every time I go.”

“I can feel it’s there, I strain for ages but I can’t pass anything.”

It should not be confused with tenesmus which is a painful and violent urge to pass a stool. This rarely occurs in IBS

3. Urgency and incontinence

I’m sure we have all experienced an urgent sense that we have to go to the toilet immediately. With IBS this is a regular feature, along with diarrhoea. Although many people worry they will not make it in time and become incontinent, our research has found this is, thankfully, rare. However, another study suggested that 16 per cent of IBS sufferers have experienced bowel incontinence at some time or another.

4. Wind

The average woman will pass wind 12 times per day, and the average man will pass wind 18 times per day. People with IBS frequently pass more wind than the average person, have more awareness of it and will worry more about the embarrassment it may cause:

“When I have a bout of IBS, my wind can be disgusting, I really worry about letting one go in front of people at work. I have called in sick if it’s too bad.”

“I don’t like it when I relax in company as I know I am more likely to break wind.”

5. Nausea, vomiting and belching

Nausea is an uncomfortable feeling in the stomach that is usually accompanied by the urge to vomit. Although not common in IBS, some people do experience these symptoms as part of their IBS.

Box 2. Symptoms frequently associated with IBS.

- Mucus stools.
- Feeling that you still need to go even after you have just been: feeling of incomplete evacuation.
- Straining to go to the toilet.
- Wind.
- Urgency and incontinence.

People with IBS can also have other symptoms not related to the bowels. These include: nausea, belching, vomiting, feeling full after eating only a small meals, tiredness, problems with passing water (urinating) and pain during intercourse.

Defining IBS

We have described many of the symptoms that make up IBS, but how do doctors then diagnose the problem? If you were expecting to find a clear definition of IBS in this section you may be disappointed. We have already said there is no definitive medical test that a doctor can give people to verify whether they have IBS. This makes IBS a clinical diagnosis. The doctor will make a diagnosis based on the symptoms a patient has over a period of time. He or she will check the person does not have any symptoms that would indicate other illnesses and only proceed with the diagnosis once these have been ruled out. For example, in younger people a doctor would want to rule out the possibility of inflammatory bowel disease, and in older people (50+) he or she would want to check for the possibility of colorectal cancer (see Chapter 2 on seeing a doctor). Only after checking this out would the doctor then make a diagnosis of IBS. It can sometimes be difficult to recognise and doctors and patients can be uncertain whether they actually have it or not. Symptoms usually fluctuate and may not occur for months or even years, or the person may find it hard to describe all their symptoms.

Over the years experts have worked to develop and refine criteria that will help make it easier to diagnose IBS. Having a recognisable set of criteria in diagnosing IBS has many advantages. Diagnoses can be transferable to other health professionals and insurance companies, ensuring some consistency between all those working in the field around the world.

The first attempt at developing specific criteria for IBS was published in 1978. Researchers at Bristol derived the Manning criteria (named after the main researcher) from symptoms reported by patients with abdominal pain who attended a hospital gastroenterology department. They found that six symptoms were more prevalent in IBS than in other organic diseases. These criteria were then tested and validated in a community setting.

Box 3. The six symptoms in the manning criteria of IBS.

1. Visible abdominal distension.
2. Relief of pain with bowel movement.
3. More frequent bowel movement with the onset of pain.
4. Loose stools at the onset of pain.
5. Passage of mucus per rectum.
6. Feeling of incomplete evacuation.

Manning studied the differences between organic disease and IBS in patients attending his gastroenterology clinic on the basis of the symptoms they described. The study was performed on 109 patients and only 32 were diagnosed with IBS after about two years.

The Manning criteria have since been validated by others around the world and shown to be able to differentiate IBS from organic gastrointestinal disease.

It is suggested that symptoms should be present for at least 3 months in the current year to rule out other problems.

The Rome criteria

An international group of gastroenterologists with a special interest in IBS felt that, while the Manning criteria were a good start, they needed refining. A set of criteria was needed that was more specific and useful when conducting research in IBS. To try and come up with a universal definition of IBS, a conference was held in Rome in 1988. The top experts in the field from Europe and North America gathered, discussed and agreed on their own criteria, which became known as the 'Rome I criteria of IBS'. The Rome criteria were promoted for use in IBS epidemiological studies and as entry criteria for clinical trials.

A couple of years later the experts returned to Rome to further refine the criteria (Rome II; Thompson *et al.*, 1999). Some specialists and doctors thought that, although the Rome II provided clear criteria for clinical research in IBS, it was too restrictive. One study suggested that, using the Rome II criteria, about two-thirds of patients diagnosed with IBS by the Rome I criteria would be excluded. Whether the Rome II criteria were too restrictive or the Rome I criteria were too lax was the talk of many gastroenterologists.

So they all went to Rome again and agreed on Rome III. Rome III is not so rigid as Rome II and, in addition to the criteria for IBS, the consensus group also gave advice concerning the investigations necessary to exclude organic disease. The Rome III criteria should be published in 2003.

Box 4. Rome III criteria for IBS.

At least 12 weeks, which need to be consecutive, in the preceding 12 months of abdominal discomfort or pain that has two of three features:

- (1) relieved by defecation; and/or
- (2) onset associated with a change in frequency of stool; and/or
- (3) onset associated with a change in form (appearance) of stool.

The following symptoms cumulatively support the diagnosis of IBS

- Abnormal stool frequency (>3/day and <3/week) (more than three times a day and less than three times a week).
- Abnormal stool form (lumpy/hard or loose/watery stool.)
- Abnormal stool passage (straining, urgency, or feeling of incomplete evacuation).
- Passage of mucus.
- Bloating or feeling of abdominal distension.

The Kruis criteria (1984)

The Kruis criteria never really took off and are not widely used. I'm only including them in this section for the sake of completeness. Kruis understood that IBS is difficult to diagnose and he believed that many people may be diagnosed with IBS when they actually have something else (we call this a false positive). Kruis tried to define criteria for IBS that would reduce this risk of overlooking an organic disease. If a person meets his criteria then they should indicate IBS with a positive predictive value of 94 per cent.

Box 5. The Kruis diagnostic criteria.

A. Questions to be completed by the patient	Score
1. Are you here because of abdominal pain? Do you suffer from flatulence? Do you suffer from irregular bowel movements?	+34
2. Have you suffered from your complaints for more than two years?	+16
3. How can your abdominal pain be described – burning, cutting, very strong, terrible, feeling of pressure, dull, boring, not so bad?	+23
4. Have you noticed alternating constipation and diarrhoea?	+14
B. Checklist to be completed by the Doctor	
1. Abnormal physical findings and/or history pathogenic for any diagnosis other than IBS	–47
2. ESR > 20 mm/2 hours	–13
3. Leukocytosis > 10 000/cm	–50
4. Haemoglobin: female <12 g per cent, male <14 g per cent	–98
5. History of blood in stool	–98
A score of 44 or more indicates IBS with a predictive value of 94 per cent.	

IBS sub-types

Some doctors will break down their patients with IBS into sub-types, labelling people as diarrhoea-predominant IBS or constipation-predominant IBS. Drug companies are especially keen on trying to identify different sub-types of IBS. This is because they can then target their drugs to helping constipation or diarrhoea specifically. Of course, as we have already mentioned, many people alternate between the two conditions and it can be difficult to categorise IBS in this way.

A concise history of IBS

IBS has been described as far back as the nineteenth century. Of course it was not called irritable bowel syndrome back then. Early accounts placed more emphasis on the discharge of mucus from the rectum; this seems a much rarer symptom today. IBS has been known by many names – colitis, mucous colitis, spastic colon, spastic bowel, and functional bowel disease. None of these terms accurately describe IBS. Colitis, for example, means inflammation of the large intestine (colon); but we know IBS does not cause inflammation. Dolhart was the first to coin the term ‘Irritable bowel syndrome’ in 1946. The name has been widely accepted, mainly because it is so vague and non-specific. The word ‘syndrome’ also suggests multiple symptoms. It does not mention the part of the bowel that is irritable or why it is irritable. In 1962 Dr Chaudhary published a paper called ‘The irritable colon syndrome’ (Chaudhary and Truelove, 1962). This was the first systematic review on the condition. It was later discovered that more than the colon was involved and the name developed to ‘irritable bowel’. Around Europe IBS may be called ‘Reizdarm’, ‘colica mucosa’, ‘colitis spastica’, ‘colon irritable’ and ‘prikkelbare darm’ syndrome.

How common is IBS?

We can see how the prevalence of IBS will vary considerably, depending on the diagnostic criteria used; but, despite this, it is very common (around 15 per cent in Western countries). If you don’t suffer from it yourself then I’m pretty sure you know someone who does. Studies of the prevalence of IBS have shown substantial differences between different countries (see Box 6).

The differences may be partly due to the different ways of defining IBS. In Denmark the prevalence of IBS was found to be 5–65 per cent, depending on the definition of IBS used, but this can’t explain all the differences. Other factors such as the ethnic mix may also affect the prevalence of IBS. In one American study IBS was five times more prevalent in white populations than in black populations. There may be other factors that affect prevalence, such as economic and social changes. Two studies looking at the incidence of IBS in Africa 11 years apart found conflicting and interesting results. The first study in 1984 suggested that IBS was rare in native Africans. In 1995 IBS was found to be around 30 per cent among the native population. In the intervening 11 years there have been significant economic and social changes in the areas studied. Could these affect the incidence of IBS?

Box 6. IBS around the world.

France	13%
Netherlands	9%
Sweden	13%
New Zealand	16%
USA	15%
UK	14%
Brazil	9%
Denmark	65%*
China	23%
Japan	25%
Singapore	3%
Iran	3%
Nigeria	30%

**Different diagnostic criteria for IBS used.*

Who is more likely to get IBS?

Nearly half the people with IBS will have symptoms before the age of 30. Generally women are affected by IBS far more than men. About 75 per cent of people with IBS are women. Not only are women more likely to have IBS, but also they are more likely to visit their doctor than men. This means that in some medical centres women make up over 90 per cent of people with IBS. It may be that cultural factors are also important. For example, in India and Sri Lanka it was found that men were more likely to report IBS than women (26 per cent women to 74 per cent men)

The course of IBS

The occurrence of IBS seems to decrease the older we get. No one is quite sure why. It has been suggested that this may be related to changes in the gut; or maybe it's just that older people don't report the symptoms so often – we are still unsure.

What are the prospects for IBS?

IBS is a chronic condition. That means that once you get it, it's likely to stay with you for many years. The good news is the symptoms will vary over time, so between

the bouts of symptoms you will also have periods with minimal symptoms or no symptoms at all.

When a number of people were asked about their symptoms a year or more apart, some people who had the symptoms had lost them. At the same time roughly an equal number of people who did not have symptoms had acquired them. The proportion of people with IBS is still roughly the same at around 15 per cent, but the people making up this 15 per cent will change from year to year.

Is it harmful?

NO!

Most people with IBS believe at some point during the illness that there is something seriously wrong with their gut. It can feel like that! IBS is often painful, uncomfortable and inconvenient and can cause a great deal of discomfort and distress, but it does not cause permanent harm to the intestines. There is no indication that there is any physical damage that occurs to people suffering from IBS. It does not lead to intestinal bleeding of the bowel or to a serious disease such as cancer, inflammatory bowel disease or Crohn's disease. As one expert put it:

“Comfortingly few have developed gut disease and, in those that do, the disease is benign and unrelated to the original symptoms.”

Summary

- Irritable bowel syndrome is a common disorder of the intestines that leads to pain, bloating and changes in bowel habits (diarrhoea and/or constipation).
- There is no current test available to identify IBS. It is diagnosed from the symptoms and by ruling out organic problems.
- Consensual criteria have been developed to help diagnose IBS.
- IBS generally occurs before the age of 30 and affects twice as many women as men.
- IBS is a chronic condition but the nature and severity of the symptoms will vary widely between people and may also change over time in the individual.

- Although often painful and inconvenient, IBS is not known to harm people suffering from it.
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