

Chapter 18

Abdominal pain

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The vast majority of patients presenting to both general practitioners and gastroenterologists with chronic abdominal pain are suffering from irritable bowel syndrome (IBS). Furthermore, because the condition is so common, it accounts for an extremely large number of consultations, both in the primary- and secondary-care settings. Organic causes need to be considered and ruled out, but unfortunately this approach has led to the tradition of diagnosing the condition by a process of exclusion. Thus, patients can often be subjected to a wide range of negative investigations, only to be told there is nothing wrong with them and it must just be IBS. Not only does this trivialise the diagnosis; it also leaves the patient with the concept that they must be imagining the condition in some way, especially as IBS is often thought of as a purely 'psychosomatic' illness.

It is far better to attempt to diagnose the condition positively and only undertake investigation when necessary. Thus, a young person presenting with the classic symptoms of abdominal pain (any location), abdominal distension and a disturbed bowel habit (constipation, diarrhoea or alternating) with no family history of inflammatory bowel disease or cancer needs little investigation initially, and it is entirely reasonable to treat on the basis of symptoms. 'Alarm' symptoms, such as rectal bleeding or persistent watery diarrhoea (the diarrhoea of IBS is usually loose rather than watery), should obviously be investigated further. Somewhat surprisingly, the intensity of pain should not necessarily raise doubts about the diagnosis as in some cases this can be extremely severe.

Some years ago, a consensus working party met in Rome in order to try and improve the definition of functional gastrointestinal disorders. This led to the production of the Rome diagnostic criteria for IBS, which were updated in 1999 and are usually referred to as the Rome II Criteria.¹ Such criteria are extremely useful for research purposes, where they ensure homogeneity of patients entering various studies. However, they have so far not been widely adopted in clinical practice and there are some concerns that they may be somewhat too restrictive for routine work.

IBS is associated with a number of other symptoms that are critically important from both a management and a diagnostic point of view.² These consist of nausea, early satiety, backache, lethargy and urinary symptoms, and it has been shown that the presence of one or more of these features helps to substantiate the diagnosis of IBS

even further.³ In addition, women with IBS often complain of dyspareunia,¹ but the pain is more reminiscent of their IBS pain and quite often arises some time after intercourse, even the next day. It has also been shown that this problem can have a profound effect on the patient's sexual function.⁴ The presence of multiple symptoms in these patients is often interpreted as meaning that they are either psychologically disturbed or hypersensitive to pain in some way. There is no doubt that patients attending secondary-care facilities with IBS tend to exhibit a high prevalence of psychopathology. However, it has also been shown that non-complaining patients in the community do not show this trend, which suggests that the presence of psychopathology makes them consult but does not necessarily cause their problem in the first place.^{5,6} Furthermore, because IBS tends to be regarded as a 'psychological' disorder, this serves to cause considerable frustration in the patient when they are constantly confronted with explanations for their problems which have a strong psychological flavour. With regard to pain sensitivity, it has been shown that patients with IBS do undoubtedly tend to exhibit visceral hypersensitivity (see below), particularly when this is assessed by balloon distension techniques. However, this should not necessarily lead to the conclusion that these patients have a generally low pain threshold, as it has been shown that patients with IBS paradoxically tend to have a better tolerance of somatic pain than healthy controls.⁷

The aetiology of IBS remains unclear but it seems likely that there is a genetic predisposition to the disorder which becomes manifest when such an individual meets one or more triggering factors. These are probably numerous but well-recognised events and include infections such as gastroenteritis, antibiotics, abdominal surgery and stress.

From a pathophysiological point of view, hypersensitivity of the gut (visceral hypersensitivity) is thought to be important.⁸ Although this probably occurs throughout the whole gastrointestinal tract,⁹ it is most conveniently measured in the rectum by a variety of balloon distension techniques. The traditional hypothesis that IBS represents some form of motility disorder is no longer fashionable. However, this does not necessarily mean that contractions should be ignored, as in the presence of hypersensitivity even normal amplitude contractions may be sensed as excessively painful. It is also extremely likely that the central nervous system plays an important role in the perception of gastrointestinal physiological function and with the advent of functional magnetic resonance imaging, this concept is currently being actively explored.

A positive approach to diagnosing IBS with minimal investigation has been shown to be remarkably robust, with little fear of serious disease being missed.¹⁰ However, because of the polysymptomatology of the disorder, there is a considerable risk of these patients being referred to other specialties where the diagnosis may be overlooked with the potential for multiple, often unnecessary, investigations and possibly even inappropriate interventions, especially of a surgical nature. To assess this aspect, we have assessed the prevalence of IBS in urological¹¹ and gynaecological¹² outpatients and found there to be a considerable excess of this disorder in such patients. This would suggest that patients with pain from their IBS who happen, for instance, to have menstrual problems, may be referred to a gynaecological rather than a gastroenterological clinic. Furthermore, if dyspareunia is also present, this might make this route of referral even more likely to happen. We also have previously shown that up to 50% of patients with IBS have urodynamic abnormalities¹³ in addition to an excess of urinary symptoms.² Thus, it is hardly surprising that referral to urologists is

also a frequent observation, with those suffering from unexplained loin pain and bladder symptoms most likely to be referred this way. Anecdotally, we have additionally seen patients who have had multiple investigations for unexplained back problems who have sometimes had questionable surgical interventions.

The importance of identifying IBS in the gynaecological setting is extremely high, not only because it may prevent unnecessary surgery but also because such surgery possibly exacerbates the underlying IBS symptoms.¹⁴⁻¹⁸ We have shown, not surprisingly, that the prevalence of IBS in the gynaecological clinic varies considerably, depending on the reason for the referral.¹² For instance, it is relatively low in patients presenting with cervical abnormalities but is most frequently observed in those with abdominal pain. We have also prospectively examined the one-year outcome of patients referred to a gynaecological clinic with abdominal pain.¹⁹ IBS was relatively rare in patients in whom a definitive gynaecological diagnosis was made, whereas in the remainder it was much more common. In addition, the prognosis in those patients with IBS was much worse than in their gynaecological counterparts, with their problems remaining unresolved after one year. These results strongly suggest that a large component of their problem emanated from their bowel rather than their gynaecological system. Thus, undoubtedly, IBS patients are finding their way into gynaecological outpatient departments where they are at risk of a poor outcome. The question of whether patients with a gynaecological cause of their pain are being referred to, and possibly overlooked, in gastroenterological clinics, has not been well addressed. It seems reasonable to assume that there must be considerable overlap in the symptomatology of some gynaecological conditions and IBS and we have some preliminary data to suggest that this is the case, particularly for pelvic inflammatory disease and endometriosis. This raises the issue of whether gastroenterologists should be assessing patients with presumed IBS for potential gynaecological problems. With respect to pelvic inflammatory disease, we have looked at the prevalence of chlamydial antibodies in patients with IBS and normal controls and found no differences.²⁰ Thus it would appear that this condition is probably not being significantly overlooked. We have also undertaken routine abdominal and pelvic ultrasound investigations in consecutive IBS patients attending the outpatient department and have not found a significant excess of gynaecological problems.²¹ However, a report published in 2000, stating that a worrying proportion of patients with ovarian cancer can present with gastrointestinal symptoms,²² suggested that there is certainly no room for complacency.

Another facet of the overlap between gastrointestinal and gynaecological symptomatology is the role of gender and sex hormones in gastrointestinal physiology. It is a common observation that even normal women experience changes in bowel habit at the time of menses and this appears to be more exaggerated in patients with IBS.²³ The cause of this is not known but is probably more likely to be due to prostaglandin release than to fluctuation in female sex hormones. However, female hormones could well be involved in the changes in rectal sensitivity to balloon distension observed during the menstrual cycle in patients with IBS.²⁴ Interestingly, this is not seen in normal controls,²⁵ which suggests that patients with IBS are more susceptible to 'gut sensitising' events for some reason. It is also of interest that females without IBS can exhibit rectal sensitivity following polyethylene glycol-induced diarrhoea, whereas this is not induced in men.²⁶ This could be interpreted as indicating that the female gender predisposes to sensitisation but additional factors such as genetic predisposition are responsible for its failure to resolve and the subsequent development of IBS.

IBS is more common in females and this has always been taken as indicating some

form of predisposition. However, the opposite possibility, that something about being male is protective, also needs to be considered. In 2000, we compared serum testosterone levels in male patients with and without IBS.²⁷ Although levels were within the normal range in IBS patients, there was a trend for them to be lower than in their healthy counterparts. In addition, luteinising hormone levels were significantly depressed in patients with IBS, suggesting that these changes had a more central origin. Thus, the question of the relationship between male hormones and the development of IBS certainly requires further attention.

The problem of overlap between gynaecological and gastroenterological symptomatology needs continuing evaluation. It would be advantageous if specialists in these two disciplines worked more closely together to ensure that such patients are offered the best possible management.

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