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CLINICAL PROFILE OF IRRITABLE BOWEL SYNDROME IN PATIENTS OF A TERTIARY CARE CENTER OF PUNJAB

Medicine

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KEYWORDS

Irritable bowel syndrome, sigmoidoscopy

INTRODUCTION

The irritable bowel syndrome (IBS) is one of the most challenging, frustrating and common gastrointestinal disorders which is less well understood. Brown first came up with the concept of irritable bowel syndrome in 1950.[1]

The IBS is recognized by its symptoms of abdominal pain and disturbed bowel habit in otherwise apparently healthy individuals. If a patient presents with symptoms like diarrhea, constipation, pain abdomen because of functional bowel disorders due to irritability of colon the diagnosis of IBS can be thought. Functional bowel disorder in which recurrent abdominal pain is associated with altered bowel habits i.e., constipation, diarrhoea or a mix of constipation and diarrhoea along with other symptoms like abdominal bloating and/or distension with an onset at least 6 months prior to diagnosis and symptoms should be present during the last 3 months as stated in the Rome IV criteria.[2]

Similar symptomatology may be seen in organic abdominal disease. So diagnosis of IBS is one of exclusion. Even the symptomatology of IBS is elusive just like its etiology and pathogenesis. Symptoms vary considerably between patients and within the same patient. There has not been much information about the prevalence of symptoms in the community especially of developing countries.

Prevalence of IBS in general population varied from 6.6-21.8%. Incidence in women was 14-24% while in men it was 5-19%.[3,4]

Various terms have been used in the past like nervous colon, unstable colon, spastic colon, mucous colitis but these are inadequate, inaccurate or both, because they describe only some possible etiologic influences (such as nervous factors) or some signs (e.g. spasticity) or they indicate inflammation which is actually absent. IBS is the most suitable and accurate term currently available since the condition is a motor disorder manifesting irritability that it is not a single disease but a syndrome and that many areas of the gut are involved.

Although it may be associated with pain and discomfort yet irritable syndrome does not predispose to chronic life threatening condition such as inflammatory bowel disease or cancer and there is no evidence that it interferes with longevity. Symptoms of IBS are markedly influenced by psychologic factors and stressful life situations.[4] While diagnosis requires exclusion of organic diseases, it is confirmed by positive clinical, psychologic, laboratory and motility findings.

AIMS OF STUDY

1. To study clinical features of patients with irritable bowel syndrome
2. To study the sigmoidoscopic appearances in patients with IBS

MATERIAL AND METHODS

100 consecutive patients attending the outpatient department were subjects of this study using Rome IV irritable bowel syndrome (IBS) criteria. Only those patients were included who had no evidence of proven gastrointestinal disease, previous abdominal surgery, multisystem diseases like diabetes mellitus nor any drug intake like NSAIDs, opioids and anticholinergics. After a detailed history each patient was taken regarding gastrointestinal symptoms like frequency, consistency of stools, incomplete evacuation, prominent gastrocolic reflex, constipation, passage of mucus or blood in the stools, tenesmus, pain abdomen, its site, duration and radiation along with precipitating and relieving factors. History of abdominal distension, upper gastrointestinal symptoms, autonomic symptoms and precipitation of symptoms by any stressful condition was also noted. After a detailed history each patient was subjected to thorough general physical and abdominal examination. Weight was recorded at first visit and end of 3 months. All patients were subjected to the routine investigations like CBC, ESR, and stool examination. Other investigations like stool culture, USG, barium enema, thyroid profile, liver function and renal function tests for malabsorption were done wherever indicated and patients with positive tests were excluded from the study. They were subjected to sigmoidoscopic examination.

RESULTS

The present study included 100 patients of which 59 were males and 41 females. 67 were from urban areas and 33 were from rural background. 88 percent of patients were between 20-60 years and 6 were between 18-20 years and 6 were more than 60 years of age.

Duration of symptoms between 3 months to 1 year was seen in 30 patients, between 1-5 year was seen in 41 patients, between 5-10 years in 17 patients and more than 10 years was seen in 12 patients.

Our observation was that IBS in our set-up was more common in males [1.44:1] and in urban population [2.03:1] especially due to sedentary life style. 74% patients were in the age group of 21-40 years.

Altered bowel habit was most often symptom seen in 97%. Feeling of incomplete evacuation was the most prominent feature amongst these patients and next common was the urge to defecate seen in 68% patients. Increased frequency of defecation, constipation and diarrhea alternating with constipation was seen in 61, 26 and 10% of patients respectively.

Next most frequent symptom was pain abdomen seen in 74% patients which was most often in the lower abdomen (33.8%) and localized to left lower abdomen in 29.5% and diffuse in 10.7%. Relief on defecation was observed in 54%. Upper abdominal fullness/bloating was seen in 74%, heart burn and sour eructations were seen in 28% associated with nausea in 26% while vomiting was seen only in 3%.

Certain autonomic symptoms were also noted which included headache (66%), urinary frequency (48%), palpitation (45%), sweaty palms (44%), dysmenorrhea (22%) and fainting attacks/syncope (10%).

Psychological stress/mental trauma was preceding event in 68% patients and during the course of illness 72% had psychological symptoms of which important were anxiety (49%) and phobias (40%).

Table 1 – SYMPTOMS/ CLINICAL FEATURES

S. No.	SYMPTOM	Percentage (%)
1.	**ALTERED BOWEL HABIT**	97
	Frequent motions	61
	Incomplete evacuation	78
	Urgency	64
	Morning frequency	48
	Constipation	26
	Diarrhoea alternating with constipation	10
2.	**PAIN ABDOMEN**	71

	Distension or bloating	71
	Relief with defecation	54
3.	**DYSPEPTIC/EPIGASTRIC SYMPTOMS**	
	Epigastric fullness	71
	Nausea	26
	Vomiting	3
	Heart burn/eructations	28
4.	**AUTONOMIC SYMPTOMS**	
	Headache	66
	Palpitations	45
	Urinary frequency	48
	Sweaty palms	44
	Dysmenorrhoea	22
	Fainting attacks	10
5.	**PSYCHOLOGICAL SYMPTOMS**	
	History of stress/mental trauma	68
	Anxiety	49
	Phobia	40
6.	**ANTIBIOTICS**	
	History of antimicrobial use in past 3 months	73
	Transient improvement in symptoms after antibiotics	44
7.	**HISTORY OF MILK INTOLERANCE**	
	History of intolerance to milk not curd	38

On general physical examination there were no specific findings except for anxious look, sweaty palms and tachycardia seen in about 60% patients. On abdominal examination abdominal tenderness was elicited in 71% patients which was common in the lower abdomen or lower left quadrant.

Sigmoidos copy in these patients showed normal mucosa in 97 patients and ulceration, friability and granularity in 1 each. While it just revealed clear mucus in 66% and rectosigmoid spasm in 46%. [Table 2]

Table 2 - SIGMOIDOSCOPIC FINDINGS

FINDING	No. of patients	Percentage
Normal mucosa	97	97
Rectosigmoid spasm	46	46
Clear mucus	66	66
Ulceration	1	1
Friability	1	1
Granularity	1	1

DISCUSSION

In this observational study 100 consecutive patients diagnosed with IBS were studied. IBS was found to be more prevalent in males. Western data has suggested IBS to be more prevalent in females, while in India, it was more often reported in males as in our study.[5] It may be due to the fact that males more often consult doctors than females because of cultural reasons.

In this prospective multi-centre study from India, using Western criteria to define constipation and diarrhoea, though most of them complained of predominant constipation (53%) or diarrhoea (47%). Interestingly, median stool frequency was similar in those reporting constipation or diarrhoea. The prevalence values of functional bowel disorders as per Rome IV criteria were 4.4%-4.8% for IBS, 7.9%-8.6% for functional constipation, 3.6%-5.3% for functional diarrhoea, 2.0%-3.9% for functional bloating or distention, 7.5%-10.0% for unspecified bowel disorders and 28.6%-31.7% for any functional bowel disorder.[6]

An important finding in our study was the wide mismatch between patient perception of constipation and diarrhoea, and physician's rating based on standard Western criteria. There were variations in bowel frequencies among subjects who describe themselves as constipated and most had feeling of incomplete evacuation. With differences in normal bowel frequencies among Indians as compared to the West, and with overlap in bowel patterns among complainants and non-complainants, we recommend that physician-determined definitions of IBS, constipation and diarrhoea should be more appropriately replaced by patient-determined definitions, at least in the context of chronic functional bowel disorders. Lack of adequate agreement between constipation based on physician definition and patient-reported constipation has been previously reported.[7] In clinical practice, it is common to see patients who are constipated but repeatedly visit the toilet in an attempt to evacuate bowel completely; such patients will report high frequency of bowel movement and so may wrongly be diagnosed as having diarrhoea. In our study 48% patients reported increased frequency while 78% reported incomplete evacuation as the reason to go to defecate repeatedly. Studies have shown that stool frequency may fluctuate from patient to patient and in the same patient from time to time.[8]

A few recent studies have shown improvement in symptoms of IBS following treatment with antibiotics. These may be instances of post-infectious IBS which have been described to be associated with IBS.[9] In the present study, 73% of patients with chronic functional lower GI symptoms had received treatment with an antibiotic in the last 3 months, often with a mistaken diagnosis of enterocolitis and had shown improvement in symptoms. Of these patients, 44% reported temporary improvement in their symptoms.

Interestingly, milk intolerance (not curd) was more common among metronidazole-responders than among non-responders. An earlier study had shown that enteritis or bacterial overgrowth may be associated with milk intolerance.[10]

Extra-intestinal symptoms were common in our patients. This is in agreement with literature from other countries.[11] In fact, some studies showed that symptoms such as sexual dysfunction are often underreported by patients.[12] Such symptoms can also be a source of anxiety, which might aggravate symptoms in functional disorders, with non-response to treatment and repeated consultation with physicians.

Among 4500 community subjects, most subjects (90%) passed stools once or twice a day. This frequency is higher than in the Western population where three or more movements per week is considered normal. This difference may be related to higher fiber intake and faster gut transit among Indians.[13]

The frequency of functional lower GI symptoms in the general population all over India needs further evaluation. In a study evaluating dyspepsia in the general population in Mumbai, of the 2549 healthy adults surveyed, 110 (4.3%) reported gastrointestinal or dyspeptic symptoms and 80 (3%) reported having only chronic lower GI symptoms.[14]

Sigmoidoscopy in these patients showed normal mucosa in 97 patients and ulceration, friability and granularity in 1 each i.e. abnormalities in mucosa was found only in 3% cases. 46 patients had rectosigmoid spasm and 66 patients had clear mucus. The results were comparable to the study by Olden who suggested mucosal abnormalities on sigmoidoscopy in 2% cases.

CONCLUSION

In conclusion, a majority of patients who present with chronic functional lower GI symptoms in India are middle-aged men, and have incomplete evacuation and mucus with stools. Abdominal pain or discomfort is an essential symptom. IBS and related functional gastrointestinal disorders may need to be re-evaluated in the light of patient perception as well as physician-determined criteria and there may be a significant difference from the data of developed countries.

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