

Irritable Bowel Syndrome in Two Different Socioeconomic Groups in Pakistan

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Irritable bowel syndrome (IBS) in outpatient department in Social Security teaching hospital and Surgimed hospital Lahore and the comparison of the two groups along with their comparison with the western data. 163 patients in social security hospital (group I) and 44 patients at Surgimed hospital (group II) were studied for irritable bowel syndrome from October 2005 to January 2007. The patients presented with abdominal distension, pain abdomen along with diarrhea / constipation were included in this study and used Rome II criteria. Diagnosis confirmed by using exclusion criteria with specific history. Data from group II patients was similar as western data while in group- I patients data differed from western data. This was due to repeated coexisting gut infections along with IBS due to contaminated water and poor compliance.

Key words. IBS-irritable bowel syndrome, abdominal distension, diarrhea, constipation.

Irritable bowel syndrome is not uncommon in Pakistan. The diagnosis of IBS remains confusing in our hospitals because of wide spread intestinal infections due to contaminated water in most parts of our country. Similarly signs and symptoms in our patients with IBS also vary from signs and symptoms of western population with IBS. IBS may be constipation related IBS or diarrhea related IBS^{1,2}. In both types the most distressing symptom is abdominal distension along with abdominal pain. Diarrhea / constipation, abdominal distension and abdominal pain is present in almost all patients of IBS^{3,4}. Anxiety, rectal discomfort and tenesmus are present in some patients with variable frequency. Also IBS is more common in our urban population than rural population. IBS is associated with significant morbidity with major economical burden due to unethical use of antibiotics prescribed by our local doctors. Most of our patients belong to poor socioeconomic group and due to chronic nature of disease, our most patients shift their treatment from allopathic to homeopathic or hakeem medication, although IBS has almost negligible mortality.

Among the etiological factors anxiety, feeding habits, food, age, sex, socioeconomic status, infections; bacterial and parasitic may play a part^{1,5}. Most of the studies done on this subject were carried out in Europe and America. Western society use more refined foods, proteins and low fibers while in our rural population people use fiber diet with low protein and urban population use relatively more protein than rural population. IBS in Pakistan is more common in rural population.

Material & method

This study was carried out on 207 patients. 163 patients presented in social security teaching hospital Multan road Lahore and 44 patients at my clinic in Surgimed Hospital Lahore.

Inclusion criteria

Rome II criteria used to include in this study.

Rome II criteria^{1,2}.

At least 12 weeks, which need not to be consecutive, in the preceding 12 months of abdominal discomfort / pain that has two of the following three features.

1. Relieved by defecation.
2. Onset associated with change in stool frequency.
3. Onset associated with change in stool form.

Exclusion Criteria

1. Patients who had features of inflammatory bowel disease; bloody diarrhea².
2. Patients who has features of intestinal tuberculosis; diarrhea alternating with constipation along with weight loss and anorexia^{1,2}.
3. Patients who had features of infective diarrhea, watery stools, fever and vomiting¹.
4. Patients who had features of intestinal obstruction / malignancy; constipation, blood in stool, abdominal mass and weight loss¹.
5. Colonoscopic abnormality^{1,2,4,5}.

Patients included in this study belong to the entirely two different socioeconomic class. The 163 patients presented in social security teaching hospital were poor factory workers with poor health status. The patients who presented in Surgimed hospital belonged to rich socioeconomic class. Their health status in majority was good. This study was carried out from October 2005 to January 2007. Proper history was taken to rule out infective diarrhea, intestinal tuberculosis, inflammatory bowel disease, malabsorption, colonic malignancy, and ovarian malignancy in females. Abdomen was examined for tenderness, mass, hepatosplenomegaly and per rectal examination for rectal mass and blood.

Following investigations were carried out; Hb, TLC, ESR, Stool examination for Leukocytes, Occult Blood, Fat contents, Undigested food particles, Ova and Cyst. Colonoscopy, CA125, X-RAY chest. Abdominal Ultrasonography to see Para aortic lymph nodes, mass, liver and spleen.

Results

Among 163 patients who presented in Social Security Hospital 91 were male and 72 were females. Among the 44 patients who presented in Surgimed Hospital, 30 were females and 14 were males. The age group was between 18 to 52 years in patients who presented in Social Security Hospital and between 27 to 63 years who presented in Surgimed Hospital. I noted a clear cut difference in general health, age group, sex distribution, symptomatology and treatment response in poor and rich socioeconomic group at two different places. One thing, which I noted was that the patients who use mineral water, responded very well to treatment. 77.165% of rich socioeconomic group responded to treatment as compared to 47.82% in poor socioeconomic group.

Table 1: Age and sex distribution chart in Social Security Hospital patients

Age (years)	Males	Females
18-35	40	34
36-50	36	29
>50	15	9

Table 2: Age and sex distribution chart in Surgimed Hospital patients

Age (years)	Males	Females
27-35	6	17
36-50	5	8
>50	3	5

Among the patients who presented in SSH 44.17 % were females and 55.83 % were males while among the 44 patients who presented in Surgimed hospital 68.18 % were females and 31.82 % were male (Table 1 & 2).

Table 3:

Major symptoms ¹	Patients at SSH		Surgimed hospital patients	
	Male	Female	Male	Female
Abdominal distension	82	67	11	10
Abdominal pain	78	60	7	22
Predominant constipation	61	53	11	21
Predominant diarrhea	30	19	3	9

Table 4: Treatment response rate in both groups

Social Security Hospital		Surgimed Hospital	
Male	Female	Male	Female
60	22	11	23
65.93%	29.72%	78.57%	76.66%
Over all (47.82 %)		Over all (77.615 %)	

The above table no.4 showing a clear-cut difference between the treatment responses in two groups. The response rate in-group II is significantly higher, 77.615 % as compared to 47.82 % in group I.

Discussion

In this study we collected the data from two different socioeconomic classes and noted that our data of male to female ratio in poor socioeconomic group is entirely different than in western population while in good socioeconomic group male to female ratio is almost in a similar fashion as in western population. Also we noted that treatment response is also significantly variable in both groups. Also the patients who used clean water in poor socioeconomic group showed better response than other patients who used simple taped water, the poor response rate in low socioeconomic group is probably due to the coexisting repeated intestinal infections due to contaminated water in most part of our country.

Table 5: Minors symptoms^{1,2} in both groups of patients

Symptoms	SSH patients		Surgimed hospital patients	
	Male	Female	Male	Female
Anxiety	14	37	03	19
Rectal discomfort	23	21	12	14
Tenesmus	26	03	10	13
Headache	31	42	0	07
Anorexia	07	45	0	0
Belching	18	05	0	0

Poor general health, headache, anorexia and belching was more common in poor socioeconomic group, this was probably due to the poor nutritional status of that group. The literacy rate was also low in social security hospital patients that was the reason of the poor compliance of the drugs that directly effects the response rate.

References

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