ANNALS OF GASTROENTEROLOGY 2001, 14(4):242-243

Editorial

Irritable bowel syndrome and inflammatory bowel disease

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The Functional Bowel Disorders (FBD) are a group of disorders in which the symptoms are referable to the mid or lower gastrointestinal tract. The symptoms include abdominal pain, bloating or distension and various symptoms of disordered defecation. Irritable Bowel Syndrome (IBS) is the most common FBD and the others include functional abdominal bloating, functional constipation and functional diarrhea.[1]

IBS diagnosis is usually more than evident when listening to the patients history and intestinal symptoms but it should always fulfill generally accepted criteria (Rome, Manning, Cruis) and be reconfirmed by clinical and laboratory exams. Medical examination includes digital examination, endoscopy and abdominal imaging (ultrasonography should be preferred). Extraintestinal symptoms, when described, are of great help. Laboratory tests include routine tests such as peripheral blood, ESR, routine biochemistry, TSH, B12 levels, ferritin, fecal cultures or more sophisticated tests when indicated, such as IgE, antigliandin antibodies, lactose, measurement of stool fat, antibodies to Entamoeba histolytica, Giardia Lamblia and IgM antibodies to CMV.[2]

The FBD, functional abdominal pain and functional anorectal disorders (incontinence, anorectal pain, pelvic floor and sphincter disorders) may be associated with altered gut sensory or motor function with no apparent alteration in the gross endoscopic or microscopic appearance of the gut. In contrast Inflammatory Bowel Disease (IBD), Crohn's disease, ulcerative colitis and indeterminate colitis are chronic inflammatory diseases of the gut with well-defined macroscopic-endoscopic and microscopic characteristics of inflammation.[3] As many of the symptoms of IBS and IBD overlap, this raises important questions:

- Is one condition a risk factor for developing the other?
- Do these conditions share similar pathophysiology and/or aetiology?
- In cases of co-existance, is prognosis or therapeutic strategy modified?
- Which factors (genetic, environmental) predispose individuals to one or both diseases?

To date, there is no conclusive evidence to answer these questions, however, there are enough data to support substantial common pathways in the development of IBS and IBD, according to many authors.

Information on the epidemiology of IBS and IBD is not well documented because it is extremely difficult to describe IBS incidence rates. However it appears that both diseases are usually diagnosed between the ages of 15 and 40 and have a female predominance in most studies except functional diarrhea. It is suggested that FBD incidence is approximately twice that the incidence of IBD. There is no doubt that for both disorders there is substantial geographic variability in the incidence and prevalence of IBS and IBD. This may be due to etiologic factors, to accessibility of health care, to demographic or cultural factors but we should not forget that every health care system and every medical education must graduate general doctors alerted to recognize these conditions.[4]

Isgar et al[5] showed that abdominal pain, pain relieved by bowel movements, incomplete evacuation, distension,

Key words: Irritable bowel syndrome, inflammatory bowel disease, functional bowel disorders, ulcerative colitis, Crohn's disease.

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diarrhea and nausea occurred significantly more frequently in patients with inactive ulcerative colitis than in healthy controls, while frequent or looser stools and constipation were not significantly different between the two groups. Extraintestinal manifestations also occur in both IBS and IBD with IBS extraintestinal symptoms being twice as frequent as those.[5]

While etiology for both diseases is not known, familial clustering has been suggested in IBS but no genetic association has been yet demonstrated. Environmental risk factors may play a role in IBS and early life events such as perinatal infections or infectious enteritis in anxious patients are regarded as promoters of both conditions.[6]

Prolonged periods of remission are common in IBD while IBS patients seem to be influenced by certain dietary components, medications, alcohol, caffeine, tobacco, chronic stress or allergic reactions.

As far as pathophysiology is concerned, boty basal and meal-stimulated colonic motility, as well as sensory perception are altered in IBD and are similar to changes found in patients with IBS. However, the perception of symptoms of similar severity appears to be greater in patients with IBS than with IBD. Only small studies in IBD suggest that there is an increased perception of symptom severity, which correlates with daily stress and an increased functional disability.[7] Evidence for a role of chronic stressors in the modulation of disease activity in IBD comes from three main sources; epidemiological studies in IBD patients, stress studies in animals and mechanistic studies on neuroimmune interactions. Prospective studies have demonstrated an increased risk of IBD symptom exacerbation following severe life events. Contrary to this, several studies support lack of correlation between life stressors and disease activity. To support one of these two approaches one should always be alert to the stress measurement scales or others measuring structures used each time for this purpose. So, at least at the moment, it is unwise to compare such studies.

In conclusion, there are several similarities between IBS and IBD which include chronicity, episodic exacerbation, heterogenous presentation, intestinal and extraintestinal symptoms, risk factors, altered gut and psychosocial function and need for supportive therapies. Management of functional bowel disorder-type symptoms in the absence of active disease is often symptom driven, similar to the treatment of functional bowel disorders.

In a large prospective study of 2956 IBS and 9900 FD patients it was clearly shown that there is no association of FBD with colorectal tumors (CRT) or IBD.[8] On the contrary, two points of main interest of this study should be stressed. The first is that patients diagnosed with IBS have an increased risk (1%) of being diagnosed with CRT during the first year of their follow up but after the first year this risk seems to be close to that of the general population. The second point of interest is that patients diagnosed with IBS always carry an increased risk (relative risk = 16.3, confidence intervals 6.6-40.7) of changing diagnosis and one day becoming IBD patients, probably Crohn's disease patients.[8]

There is increasing agreement that autonomic nerve abnormalities can often be associated with functional disorders of the gut. Once more, the urgent need for studies focusing on the disease mechanism (pathophysiology, natural history) rather than clinical manifestation and symptomatic treatment is apparent.

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