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Editorial

Irritable Inflammatory Bowel Syndrome as a Distinct Disease Entity

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Article: Prevalence of irritable bowel syndrome-like symptoms in Japanese patients with inactive inflammatory bowel disease
Tomita T, Kato Y, Takimoto M, et al
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The prevalence of inflammatory bowel disease (IBD) is increasing in Asia.[1] Although IBD is known to be a rare disease, irritable bowel syndrome (IBS) is a common condition in the general population. Six percent of the Korean population seeks medical treatment for IBS at least once a year.[2] Even though IBD and IBS seem to be independent entities, they have similar pathogeneses such as mucosal inflammation, intestinal permeability, and dysbiosis.[3] It was suggested that IBS and IBD represent a part of the same disease spectrum.[4]

When IBD patients have lower gastrointestinal symptoms, the clinician would be in a predicament regarding further management, since it augments the possibility of either a remaining active inflammation, or a coexisting IBS symptom development that is a remission of IBD. The concept of irritable inflammatory bowel syndrome (IIBS) has been suggested.[5] The diagnostic criteria for IIBS is as follows. First, patients should have IBD and be in a clinical remission state with normal C-reactive protein, and Crohn's disease (CD) activity index < 150, or its equivalent derived from other disease activity indices. Second, the Rome III criteria should be fulfilled for a diagnosis of IBS.

In this issue of the *Journal of Neurogastroenterology and Motility*, Tomita et al[6] report on the prevalence IBS-like symptoms in inactive IBD patients. In this regard, this research applied to IIBS. They concluded that the prevalence of IBS-like symptoms in inactive IBD patients was higher than in healthy controls. The prevalence of IBS-like symptoms in inactive ulcerative colitis (UC) was 17.5% and inactive CD was 27.1% compared to 5.3% of healthy controls. Interestingly, the prevalence of IBS-like symptoms in IBD patients was lower compared to previous studies, because they defined IBD and IBS clearly. That is, inactive IBD was defined based on the clinical disease activity index and C-reactive protein measurements, which are readily used in clinics, while IBS was defined according to the Rome III criteria. The above are compatible with the diagnostic criteria of IIBS. Is there any useful tool which can diagnose this new disease entity? Fecal calprotectin is probably a good answer. Calprotectin levels were elevated in IBD patients in the remission stage,[7] in comparison with normal range in IBS patients. Measuring fecal calprotectin would be a useful step to differentiate active IBD and overlapping IBS symptoms in IBD patients.[4]

CD patients showed low quality of life and higher anxiety scores in this study. Patients with IBD in remission who suffer IBS-like symptoms experienced fatigue, and disease-related worries.[8]

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Bidirectional communications between the gut microbiota, gut permeability, and the central nervous system exist. Increased gut permeability which is an important pathologic process in IBD and IBS seems to be the keystone of the microbiome-gut-brain interaction.[9] Antidepressants may be a possible management of IBS-like symptoms in IBD patients. Amitriptyline and selective serotonin-reuptake inhibitors are effective for treating psychological symptoms in IBD patients.[10] The evidence of probiotic therapy for IBS is still poor because of insufficient efficacy of current data,[11] and therefore, probiotic therapy for IIBS is still questionable.

This was a retrospective cross sectional study, therefore, it would not be expected if initial disease severity correlated with development of IBS-like symptoms during clinical course. The prevalence of IBS-like symptoms in the CD group was higher than that of the UC group in this study, which corresponds to previous studies. It may be related to small intestine involvement in CD patients. However, patients who underwent surgery were found only in the CD group in this study, where more IBS-like symptoms would occur associated with ileus than UC patients without having a past surgical history.

In summary, it is difficult in IBD patients to discern between active IBD and coexisting IBS symptoms in the remission state. The pathogenesis of IBS in IBD patients is incompletely understood compared to that of IBS in the healthy population. However, IBS-like symptoms in IBD patients should be focused on as a new distinct disease entity. The authors' work raised the importance of IBS-like symptoms in IBD patients. Many more researches in this field are expected from now on.

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References

1. Ng WK, Wong SH, Ng SC. Changing epidemiological trends of inflammatory bowel disease in Asia. Intest Res 2016;14:111-119.
2. Jung HK, Kim YH, Park JY, et al. Estimating the burden of irritable bowel syndrome: analysis of a nationwide korean database. J Neurogastroenterol Motil 2014;20:242-252.
3. Gracie DJ, Ford AC. IBS-like symptoms in patients with ulcerative colitis. Clin Exp Gastroenterol 2015;8:101-109.
4. Quigley EM. Overlapping irritable bowel syndrome and inflammatory bowel disease: less to this than meets the eye? Therap Adv in Gastroenterol 2016;9:199-212.
5. Stanisic V, Quigley EM. The overlap between IBS and IBD: what is it and what does it mean? Expert Rev Gastroenterol Hepatol 2014;8:139-145.
6. Tomita T, Kato Y, Takimoto M, et al. Prevalence of irritable bowel syndrome–like symptoms in Japanese patients with inactive inflammatory bowel disease. J Neurogastroenterol Motil 2016;22:661-669.
7. Jelsness-Jørgensen LP, Bernklev T, Moum B. Calprotectin is a useful tool in distinguishing coexisting irritable bowel-like symptoms from that of occult inflammation among inflammatory bowel disease patients in remission. Gastroenterol Res Pract 2013;2013:620707.
8. Jelsness-Jørgensen LP, Bernklev T, Moum B. Fatigue and disease-related worries among inflammatory bowel disease patients in remission; is it a reflection of coexisting IBS-like symptoms? A short report. J Psychosom Res 2012;73:469-472.
9. Yarandi SS, Peterson DA, Treisman GJ, Moran TH, Pasricha PJ. Modulatory effects of gut microbiota on the central nervous system: how gut could play a role in neuropsychiatric health and diseases. J Neurogastroenterol Motil 2016;22:201-212.
10. Abraham BP. Symptom management in inflammatory bowel disease. Expert Rev Gastroenterol Hepatol 2015;9:953-967.
11. Mazurak N, Broelz E, Storr M, Enck P. Probiotic therapy of the irritable bowel syndrome: why is the evidence still poor and what can be done about it? J Neurogastroenterol Motil 2015;21:471-485.