EDITORIAL

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Is primary sclerosing cholangitis with inflammatory bowel disease different between patients in the East and West?

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Article: Association of young age and male sex with primary sclerosing cholangitis in Taiwanese patients with inflammatory bowel disease **(Intest Res 2022;20:224-230)**

Inflammatory bowel disease (IBD), a chronic inflammatory disease of the gastrointestinal tract, including ulcerative colitis (UC) and Crohn's disease, can present various extraintestinal symptoms.[1] Primary sclerosing cholangitis (PSC) is a chronic cholestatic liver disease characterized by inflammation and fibrosis of intra- and extrahepatic bile ducts, and it is associated with IBD, particularly UC, in up to 80% of PSC patients.[1,2]

In a comparative Taiwanese study of IBD patients with and without PSC, conducted between 1996 to 2018, Weng et al.[3] reported that those of younger age and male sex had a higher risk of IBD with PSC. In that study, PSC was diagnosed in only 12 of the 763 patients examined, including pediatric patients, and the prevalence of PSC was reported to be 1.57%, all of which were UC cases. This is a small percentage compared to the 2.4%–7.5% prevalence of UC and about 3% prevalence of Crohn's disease in Western countries. Mehta et al.[4] reported a systematic review and meta-analysis of global incidence, prevalence, and features of PSC. They analyzed 17 studies conducted in North America, Europe, and Asia and reported a high male prevalence, a bimodal distribution, and a high association between PSC and IBD among PSC patients. In North America and Europe, PSC-IBD was reported in 70% and 63% of cases, respectively, and in East Asia, PSC-IBD was reported in 34% of cases. This difference between East and West can be confirmed not only in PSC but also in the clinical course of IBD. Song and Yang[5] reported racial differences in disease phenotype and genotype, high prevalence of infectious diseases, and medication response/adverse events between IBD patients in the East and West. Additional research on PSC-IBD in Asia is needed as the few studies available limit the comparative analyses that can be performed.

Some studies have suggested that IBD with PSC appears to have a distinct phenotype, different from IBD without PSC.[6,7] PSC-IBD patients have characteristic features of backwash ileitis, pancolitis, rectal sparing, and low disease activity.[1] In addition, Ostadmohammadi et al.[8] reported that the gut microbiome of patients with PSC-IBD was rich in *Bacteroidetes*, differing from that of patients with IBD alone, which was rich in *Firmicutes*. In the study by Weng et al.,[3] there was a higher rate of rectal sparing in patients with PSC-IBD, but not in the extent of colitis. This difference may be due to IBD presenting a slightly different clinical phenotype in Asian IBD patients compared to Western patients. For example, Asian patients with UC have decreased family aggregation, decreased extraintestinal symptoms, and worsened clinical outcomes for elderly patients.[9] In addition, treatment methods such as ursodeoxycholic acid, surgical resection, and liver transplantation are still used for PSC-IBD patients, but the effect of vedolizumab was recently reported in the West.[10] Additional research on the phenotype

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and characteristics of PSC-IBD and the effects of various drugs in Asian patients is required to provide more effective treatment.

ADDITIONAL INFORMATION

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