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Letter

Endoscopic ultrasonograms in patients with Behçet's colitis

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To the Editor:

Behçet's disease is a systemic inflammatory disorder of unknown etiology. Although Behçet's disease has a worldwide distribution, cases are especially prevalent in Japan, the Middle East, and some Mediterranean countries. Behçet's disease is characterized by recurrent oral aphthous ulcers and genital ulcers, and can be life-threatening.[1] In gastrointestinal Behçet's disease, the lesions can be distributed along the full length of the gastrointestinal tract from the mouth to the anus. However, the ileocecal region is most frequently affected, although the transverse colon, ascending colon, and rectum may also be involved. Behçet's disease with intestinal involvement may exhibit similar clinical manifestations to other inflammatory bowel diseases such as Crohn's disease and ulcerative colitis.[2] Here, we describe the use of a discriminatory endoscopic ultrasonogram (EUS) in a male patient with Behçet's colitis.

A 34-year-old man was admitted with right knee arthralgia, erythema nodosum on the right leg, oral aphthous ulceration, and bloody stools. Blood tests revealed a mild leukocytosis, and an elevated erythrocyte sedimentation rate, CRP, and immunoglobulin D level (21 mg/dl). A pathergy test was positive and he was found to be HLA-B51-positive. A diagnosis of Behçet's disease with gastrointestinal involvement was made according to international criteria for the diagnosis of Behçet's disease[3] based on the following clinical evidence: (1) recurrent oral ulceration; (2) skin lesions (erythema nodosum); (3) positive for pathergy test. Colonoscopy revealed multiple aphthous ulcers in the sigmoid colon (Fig. 1A). An EUS, consisting of an Olympus UM-3R catheter with an operating frequency of 20 MHz providing B-mode 360° radial imaging in a plane perpendicular to the axis of insertion, was used to examine the same lesions. The EUS revealed the thickened colonic wall and disruption of the normal five-layer wall structure, indicating transmural inflammation (Fig. 1B). The intestinal lesions typical of Crohn's disease are characterized by the presence of longitudinal ulcers with a cobblestone appearance together with noncaseating epithelioid granulomas. The intestinal ulceration in our patient lacked the endoscopic characteristics of Crohn's disease ulceration. Therefore, in view of the clinical manifestations and the previously reported histological findings, a diagnosis of Behcet's colitis was made.[4]

EUS is also useful for an assessment of the disease severity. One month after treatment with 5-aminosalicylate (Pentasa 1.5 g/day; Nisshin-Kyorin Pharma Co., Tokyo, Japan) was started, the patient's abdominal symptoms and genital ulcers improved. A repeat colonoscopy showed resolution of the multiple ulcers (Fig. 1C), and EUS revealed an improvement in the swelling and thickness of the colonic wall, which was almost restored to a normal five-layer structure (Fig. 1D). Since the EUS images demonstrated reduced wall thickness and disruption of the colonic wall structure indicative of an improvement in the underlying inflammation, we did not repeat the histological studies.

Gastrointestinal symptoms are common in Behçet's disease, with ileal ulcers, peritonitis, and gastric ulcers being the most common, whilst colitis is rare.[5] In contrast to the ulcers characteristic of ulcerative colitis, the ulcers in Behçet's disease are less frequent in the colon and very rare in the rectum (6%).[12]

Arthritis, uveitis, oral aphthous ulcers, erythema nodosum, and venous thromboembolism are typical clinical features of Behçet's disease. However, these symptoms also occur in 1%–39% of patients with inflammatory bowel dis-

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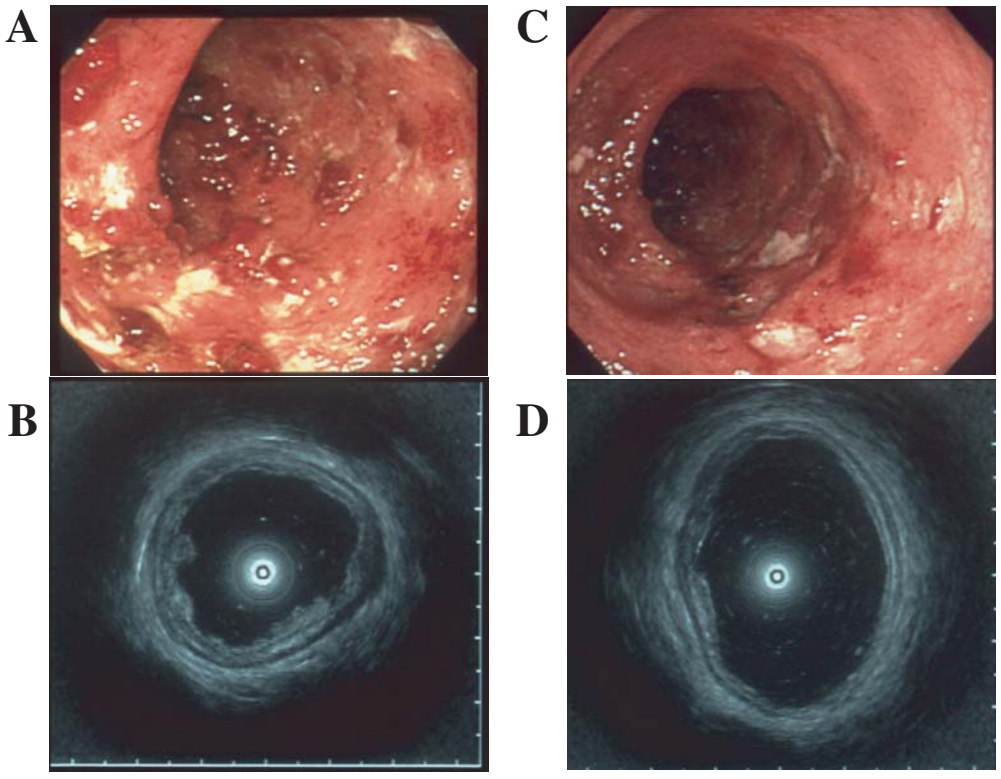

Fig. 1. Results of colonoscopic study and endoscopic ultrasonograms of aphthous ulcers on the sigmoid colon. **A**,**B** Before and **C**,**D** after treatment

eases such as ulcerative colitis.[7] Therefore, it can be difficult to distinguish between Behçet's disease with ulcerative colitis-like lesions and ulcerative colitis with BD-like extraintestinal complications. It has been reported that the colitis in Behçet's disease tends to be transmural, whereas it is superficial and mucosal in ulcerative colitis.[8] Accordingly, we gave a diagnosis of Behçet's disease complicated with colitis.

EUS has evolved into a diagnostic modality that allows the visualization of the entire thickness of the bowel wall through cross-sectional imaging. As discussed above, EUS can also be used to evaluate the disease activity of the colitis, thereby limiting the requirement for further histological studies.

In conclusion, EUS is a useful tool for predicting the severity of histological changes in Behçet's disease, and could be used to help distinguish Behçet's disease from IBD.

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