## The Case of De Novo Crohn Occurring after Treatment of Hidradenitis Suppurativa: Coincidence?

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Dear Editor,

The association of Crohn's disease and hidradenitis suppurativa (HS) is known. There is a 12.8% incidence of HS in Crohn's patients, and a 2.12-fold incidence of Crohn's in HS. The duration of paradoxical hidradenitis cases is due to biological agents used in the treatment of Crohn's disease.<sup>1</sup> In this article, a case of no novo Crohn in the tenth year under anti-tumor necrosis factor (TNF) therapy in patients followed up with HS is presented. This article was written in view of the perception that inflammatory root diseases may develop even years after the diagnosis seen in patients followed up with HS.

Our case, a 48-year-old male patient, was diagnosed with HS 12 years ago because of painful, nodular lesions in the axilla and inguinal. At the time of diagnosis, ileocolonoscopy was performed in terms of the association of inflammatory bowel diseases, and it was evaluated as normal. Local, systemic antibiotics and systemic steroid treatment were started in the patient, and adalimumab 40 mg/week treatment was started when there was no adequate response under steroid treatment. Abscess drainage and reconstruction surgeries were performed on the patient who did not respond adequately to adalimumab treatment. Due to inadequate response, adalimumab treatment was discontinued in the first year of treatment and 5 mg/ kg infliximab treatment was started. Significant regression was observed in the lesions starting from the third month of infliximab treatment in the patient. In the control colonoscopic examination performed in the third year of the treatment, the colon and ileum mucosa were normal. While he was being followed in remission for HS in the tenth year under infliximab treatment, the patient developed abdominal pain and diarrhea attacks up to 8 times a day. Physical examination did not reveal any finding other than tenderness in the lower abdominal quadrants. C-reactive protein (CRP) was measured as 75 mg/L (0-5), sediment 73 mm/h (0-15), albumin 30 g/L, WBC  $12.3 \times 109$  (4.5-11), other laboratory values were normal. The patient underwent a colonoscopy. The evaluated ileal mucosa was normal, but extensive deep ulcerations with omissions were observed in the entire colon, and extensive pseudopolyps were observed in the mucosa. In the patient, Crohn with colonic involvement was considered in the foreground. The patient underwent an magnetic resonance imaging-enterography for small bowel involvement and perianal involvement. Small intestine segments were observed naturally, and no fistula was detected. Treatments of 100 mg azathioprine and 4 g of mesalazine were added to the patient. It was observed that the complaints regressed significantly 2 months after the diagnosis. The patient is in remission with infliximab, azathioprine, and examplezin treatments, and regular follow-ups continue.

It is known that paradoxical HS may develop in Crohn's patients receiving anti-TNF. In a recent multicenter study, adalimumab was responsible for 46% of paradoxical HS cases that developed after biological treatments.<sup>2</sup> Although the pathogenesis of HS induced by anti-TNF drugs has not been fully explained, it is thought that it may induce a modulation in the immune system in genetically predisposed individuals, cause a change in the cytokine balance, and cause an increase in proinflammatory cytokines.<sup>3</sup> In some studies, interleukin-1(IL-1), IL-6, IL-17, IL-23, and similar immune dysregulation mechanisms with increased cytokines such as TNF were detected.<sup>4</sup> Many cases of HS after anti-TNF have been reported in the literature; however, a new case of Crohn after treatment was not encountered in the literature. A case of Crohn's disease, which developed years after diagnosis in a patient who was followed up and treated with HS, was discussed.

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