

Title:

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Successful treatment of Crohn's disease, aseptic liver abscess and psoriasis with ustekinumab

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Dear Editor,

Crohn's disease (CD) is a chronic inflammatory disorder of the gastrointestinal tract that is commonly known to affect the ileum and colon¹. Aseptic abscess (AA) has been pathologically described as sterile abscess with a predominance of polymorphonuclear leucocyte infiltrates², and is considered a rare extraintestinal manifestation of CD³. AA presents a great challenge to physicians in determining if it is an extraintestinal manifestation of CD or an actual infection with pathogenic microorganisms⁴. There is a strong association between CD and psoriasis. But the coexistence of AA and psoriasis in CD was unusual. Ustekinumab, as an IL 12/23 inhibitor, is the only treatment with a similar mechanism currently available for both CD and psoriasis. We report a case of successful use of ustekinumab to treat a CD patient with hepatic AA and psoriasis.

A 64-year-old man with a 33-year history of CD who had been previously treated with mesalazine 3 g/day was admitted to our hospital due to fever, abdominal pain, hematochezia (more than four times per day), and a painful skin eruption for three weeks (Figure 1I, J). He had a history of recurrent liver abscess, with a total of three hospital admissions in the last year that were treated with several courses of different antibiotics. Subsequent laboratory findings were as follows: White blood cells (WBC) $12.66 \times 10^9/L$, Hemoglobin (Hb) 88 g/L, C-reactive protein (CRP) 25.5 mg/L, and Albumin (ALB) 27.8 g/L. Stool culture and *Clostridium difficile* toxin were negative. The abdominal contrast-enhanced Computed Tomography (CT) and magnetic resonance imaging (MRI) showed that there was a thickened intestinal wall in colorectum and confluent hypodense lesion in the left liver ($5.1 \times 4.5 \times 6.5$ cm) (Figure 1A-D, H). Colonoscopy showed active inflammation (Figure 1E-G). The patient was then treated with intravenous antibiotics (Vancomycin, levofloxacin, and meropenem). Aspiration of the abscess revealed pus. The abscess was drained. Cultures of blood and the aspirate remained sterile ever after 7-day incubation. The diagnosis of this patient was considered as active CD associated with hepatic AA and psoriasis. Therefore, antibiotics were discontinued, and he was started on ustekinumab therapy. Eventually, Laboratory findings indicated that the clinical condition of this patient gradually improved: WBC $6.72 \times 10^9/L$, CRP 6.5 mg/L, ALB 34.5 g/L and Hb 108 g/L. His fever, abdominal pain, and hematochezia improved, and

the tube was removed. Thereafter, we continued the administration of ustekinumab at the outpatient clinic.

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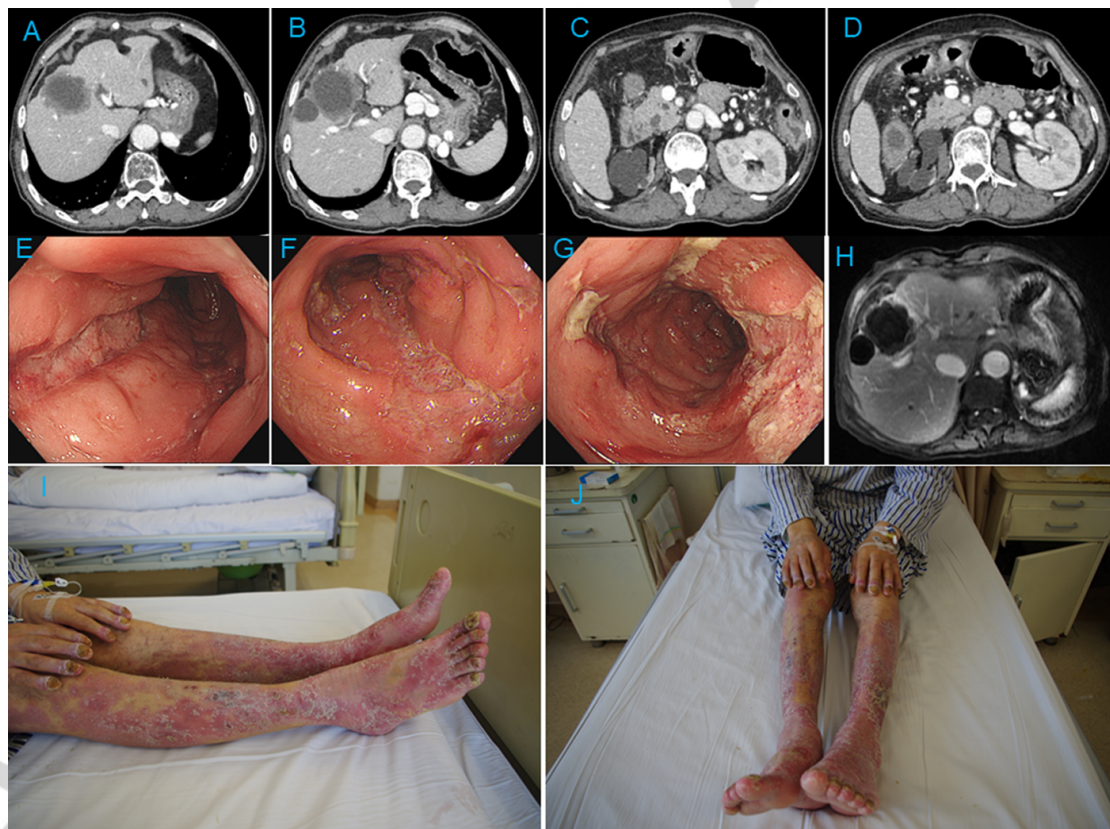


Figure Legends

Figure 1 A-D, H: Abdominal CT and MRI showed thickened intestinal wall in colorectum and confluent hypodense lesions in the left liver (5.1×4.5×6.5 cm); E-G:

Colonoscopy suggested active inflammation; I, J: Skin eruption.

Accepted Article