

[LETTERS TO THE EDITOR]

Listeria Meningitis during Infliximab-based Treatment for Ulcerative Colitis

Key words: *Listeria*, TNF- α blockers, meningitis, ulcerative colitis, septicemia, Infliximab

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To the Editor I read with interest the article in Internal Medicine authored by Inoue et al., “*Listeria Monocytogenes* Septicemia and Meningitis Caused by *Listeria* Enteritis Complicating Ulcerative Colitis.” These authors reported a case of *Listeria* enteritis leading to a worsening of ulcerative colitis, and ultimately septicemia and meningitis, during prednisolone+azathioprine+5-aminosalicylic acid therapy. They wrote that *Listeria* should be considered when a patient with ulcerative colitis is taking immunosuppressive therapy and develops diarrhea, colitis, and other symptoms (1). We recently experienced a similar patient who developed *Listeria* meningitis during Infliximab-based therapy for ulcerative colitis. We write this letter to introduce our case and add an important message.

A 62-year-old woman was admitted with the sudden onset of abdominal pain, nausea, watery diarrhea, a high grade fever, and joint pain. Seventeen years earlier, she had been diagnosed with ulcerative colitis and been treated over the past 5 years with 5-aminosalicylic acid (3,600 mg/day), 6-mercaptopurine (45 mg/day), and Infliximab (5 mg/kg, every 8 weeks) with documented endoscopic and clinical remission (Mayo endoscopic sub-score 0). Blood tests at admission revealed markedly elevated levels of C-reactive protein (CRP; 18.96 mg/dL, normal: <0.14 mg/dL) and a normal white blood cell count (5,000/ μ L, normal: 3,300-8,600/ μ L). Computed tomography revealed wall thickness from the sigmoid colon to the rectum, suggesting colitis. After admission, she experienced impaired consciousness (Glasgow coma scale 14) with headache, neck stiffness, hearing disturbance, and diplopia. Lumbar puncture revealed cloudy spinal

fluid, elevated total protein, elevated fluid pressure, and decreased glucose levels, suggesting bacterial meningitis. Simultaneously, *Listeria* was detected in blood and stool cultures. Ampicillin at 12 g/day was started, and the symptoms gradually improved over 79 days of antibiotics.

Both of these cases began with *Listeria* colitis that progressed to septicemia and meningitis. *Listeria* meningitis occurs during antibody therapy to fight tumor necrosis factor alpha and suppress cell-mediated immunity (2-4). In 2001, the U.S. Food and Drug Administration reported serious infections with *Listeria* and *Legionella* during tumor necrosis factor alpha blocker therapy. The number of patients with ulcerative colitis has increased in recent years, and tumor necrosis factor alpha blockers are often used with other immunosuppressants in both young and old patients. We must be alert for *Listeria* infections in patients taking immunosuppressants, especially tumor necrosis factor alpha blockers.

The authors state that they have no Conflict of Interest (COI).

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