

Case Report

Hepatitis B Virus Reactivation Induced by Infliximab Administration in a Patient with Crohn's Disease

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A 47-year-old man diagnosed with Crohn's disease was treated with infliximab. He tested negative for hepatitis B surface antigen (HBsAg) and hepatitis B surface antibody (anti-HBs) but positive for anti-HB core antibody (anti-HBc). He tested positive for hepatitis B virus (HBV-) DNA 3 months after treatment and was administered entecavir. HBV-DNA test showed negative results 1 month later. ALT was persistently within the normal range, and HBV-DNA was persistently negative thereafter despite the continuation of infliximab every 8 weeks. In our hospital, 14 patients with inflammatory bowel disease, who tested negative for HBsAg, were treated with infliximab; 2 of them tested positive for anti-HBs and/or anti-HBc, and HBV reactivation was observed in 1 patient (the present patient). The present case and these findings highlight that careful follow-up is needed in patients with inflammatory bowel disease treated with infliximab who test positive for anti-HBc and/or anti-HBs.

1. Introduction

Crohn's disease is a chronic and intractable inflammatory disorder of the gastrointestinal tract [1]. Many types of therapy have been introduced to treat Crohn's disease, such as nutritional therapy, 5-aminosalicylic acid drugs, corticosteroids, azathioprine, and 6-mercaptopurine [2–6]. Monoclonal antibodies against tumor necrosis factor alpha (anti-TNF α), such as infliximab and adalimumab, have recently been used to treat inflammatory bowel disease [7–9]. Short- and long-term anti-TNF- α therapies in Crohn's disease are generally well tolerated. However, clinicians must be vigilant for the occurrence of infrequent but serious events [10].

Immunosuppressive therapy may induce the reactivation of hepatitis B virus (HBV), not only in patients in an inactive hepatitis B surface antigen (HBsAg) carrier state, but, in resolved patients as well. HBV reactivation in HBV-resolved patients may cause hepatitis (i.e., de novo hepatitis). Moreover, hepatitis B reactivation due to immunosuppressive

therapy sometimes progresses to severe hepatitis, and several fatal cases have been reported [11, 12].

Here, we report the case of a patient with Crohn's disease who tested negative for HBsAg and positive for anti-HB core antibody (anti-HBc) and exhibited HBV reactivation during treatment with anti-TNF- α antibody (infliximab).

2. Case Report

A 47-year-old man, with a history of abdominal operations because of perforation of the ileum and ileus in 2000 and 2001, respectively, and diagnosed with Crohn's disease histologically in 2000, was admitted to our hospital because of abdominal pain. He was diagnosed with intestinal stricture of the ascending colon due to Crohn's disease (Figure 1). He was treated by resection of the ascending colon, followed by treatment with anti-TNF- α (i.e., infliximab). The patient was negative for HBsAg, hepatitis B surface antibody (anti-HBs),