OLGU SUNUMU /CASE REPORT

Hepatitis C Coinfection in a Patient with Chronic Hepatitis B

Kronik Hepatit B Enfeksiyonu olan Hastada Görülen Hepatit C Koenfeksiyonu

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ABSTRACT

Hepatitis B virus (HBV) and hepatitis C virus (HCV) are important causes of deaths due to chronic liver disease, cirrhosis and hepatocellular carcinoma. Both viruses can cause chronic disease without causing an acute and noisy disease picture. When HBV/HCV coinfection is detected, it accelerates disease progression and increases the risk of cirrhosis and hepatocellular carcinoma compared to monoinfection. In this case report, anti-HCV positivity detected in outpatient clinic controls of an asymptomatic chronic hepatitis B patient and the subsequent treatment and follow-up of the patient are presented.

Key words: *viral hepatitis, chronic hepatitis B, hepatitis C, coinfection, direct-acting antivirals*

ÖZET

Hepatit B virüsü (HBV) ve hepatit C virüsü (HCV) kronik karaciğer hastalığı, siroz ve hepatoselüler karsinoma bağlı ölümlerin önemli nedenlerindendir. Her iki virüs de akut ve gürültülü bir hastalık tablosuna yol açmadan kronik hastalığa neden olabilir. HBV/HCV koenfeksiyonu tespit edildiğinde, hastalığın progresyonunu hızlandırır ve monoenfeksiyona kıyasla siroz ve hepatoselüler karsinom riskini artırır. Bu olgu sunumunda, asemptomatik kronik hepatit B hastasının poliklinik kontrollerinde saptanan anti-HCV pozitifliği ve sonrasında hastanın tedavi ve takibi sunulmuştur.

Anahtar kelimeler: *viral hepatitler, kronik hepatit B, hepatit C, koenfeksiyon, doğrudan etkili antiviraller*

Introduction

Hepatitis B (HBV) and hepatitis C (HCV) virus infections are important causes of chronic liver diseases. Patients with coinfection have an increased risk of progressive liver disease, cirrhosis, fulminant hepatitis and hepatocellular cancer compared to monoinfection. In Türkiye, 10.165 hepatitis patients were screened, and HBV/HCV coinfection was found in 99 of these patients (approximately 1%) (1). This case report was prepared to draw attention to the adverse consequences of coinfection relative to monoinfection.

Case Report

We present a 51-year-old male patient with chronic hepatitis B for 10 years who is not on any medication. Laboratory findings: alanine transaminase (ALT): 47 U/L, aspartate transaminase (AST): 33 U/L, HBsAg: 1308 COI (positive), anti-Hbs: negative, HbeAg: negative, anti-Hbe: positive, anti-HCV: 31.44 (positive), anti-Hbc IgG: positive, HBV-DNA: negative. HCV-RNA: 230100 IU/mL (positive). The patient was in the HbeAg-negative chronic hepatitis B infection phase. Abdominal ultrasonography findings supporting cirrhosis were not detected. Patient refused liver biopsy. The patient was started on an 8-week glecaprevir/pibrentasvir treatment for hepatitis C. Since he was HbsAg positive, entecavir 1 mg hepatitis B prophylaxis was added to the treatment. After discontinuation of direct-acting antiviral (DAA) treatment, entecavir treatment was continued for another 12 weeks.

The patient's results 24 weeks after the end of DAA treatment: ALT: 18 U/L, AST: 19 U/L, HBsAg: 633, COI (positive), anti-Hbs: negative, HBV-DNA: negative, HCV-RNA: negative. Abdominal USG findings supporting cirrhosis were not detected.

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Discussion

In general, an increase in the severity of chronic liver disease, progression to cirrhosis and an increased incidence of hepatocellular carcinoma have been reported in coinfection compared to monoinfection (2–4). In the study, HCV co-infection contributes to liver fibrosis in HBV patients. At the same time, the likelihood of decompensated cirrhosis was found to be increased in co-infected patients compared to monoinfected patients (4). The cumulative incidence rate of hepatocellular carcinoma and cirrhosis was found to be higher in the coinfection group than in the HBV monoinfection group (5). In another study, the rate of cirrhosis and decompensated liver disease was found to be higher in patients with HBV/HCV coinfection compared to patients with HBV monoinfection (6). There are also studies showing no relationship between coinfection and the severity of liver disease (3,7). Liver biopsy samples obtained from patients with HCV monoinfection and coinfection were examined, revealing higher rates of inflammation in the coinfection group and higher rates of fibrosis in the HCV monoinfection group (7). In patients with HBV/HCV co-infection, treatment of HCV with direct-acting antiviral (DAA) drugs may cause reactivation of HBV. In patients with chronic hepatitis B, antiviral prophylaxis treatment is initiated for HBV. Hepatitis B virus prophylaxis should be continued for up to 12 weeks after completion of DAA treatment.

Conclusion

In routine policlinic controls of mono-infected patients, diagnostic tests for both hepatitis agents should be requested, considering the possibility of co-infection. If HBsAg positivity is present in patients who will receive HCV treatment with DAA drugs, care should be taken about the risk of HBV reactivation that may develop during treatment with DAAs, and antiviral prophylaxis for hepatitis B should be started.

Conflict of Interest

The authors declare no conflict of interest.

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