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Secukinumab for psoriasis in a patient with hepatitis B

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Abstract

The case reported describes a 48-year-old man with congenital hepatitis B receiving secukinumab for treatment of psoriasis. Some biologic therapies have been associated with an increased risk of reactivation of hepatitis B. In the case of this patient, secukinumab has successfully managed his psoriasis without evidence of hepatitis B virus reactivation.

Keywords: biologics, HBV reactivation, therapy

Introduction

The safety of biologic therapy in the setting of hepatitis B virus (HBV) infections remains controversial. The use of biologics in patients with immune diseases, such as psoriasis, has been associated with reports of HBV reactivation. There is an FDA warning suggesting that patients with HBV should not be treated with biologics targeting tumor necrosis factor (TNF), [1, 2]. Secukinumab is an anti-interleukin (IL) 17A monoclonal antibody that demonstrates high efficacy in treating plaque psoriasis [3, 4]. IL-17 is a cytokine produced by T-helper 17 (T_h17) cells, and both T_h17 cells and IL-17 may be involved in the pathogenesis of viral hepatitis. Furthermore, IL-17 plays an important role in HBV activity. Studies have identified increased serum levels of IL-17 and frequency levels of T_h17 as indicators for HBV infection and progression [5-7]. Safety data for secukinumab in patients with psoriasis and HBV are lacking because these patients are excluded from initial clinical trials.

Case Synopsis

A 48-year-old man with a history of psoriasis and psoriatic arthritis presented for psoriasis flaring on his trunk, extremities, and hands. Psoriatic arthritis was present in the fingers, elbows, and feet. The patient is a carrier of congenital HBV; however, viral loads are stable and monitored biannually. He was treated previously with etanercept and phototherapy with no improvement. During previous therapy, etanercept did not reactivate HBV or affect viral load. The patient began treatment with secukinumab. Following treatment, lesions improved (BSA 2%), with erythematous polycyclic post-inflammatory pigment changes left from the resolving psoriatic plaques. Joint pain and stiffness in fingers and elbows improved as well. The patient has continued secukinumab over a two-year period with successful management of psoriasis and psoriatic arthritis. HBV load has remained stable throughout the duration of treatment.

Case Discussion

Although there is a risk of HBV reactivation with anti-TNF therapy, the benefit-risk ratio in patients with psoriasis and HBV may be justified. Secukinumab may be a viable treatment option for management of patients with psoriasis and/or psoriatic arthritis with HBV. Viral loads should continue to be closely monitored for reactivation of the hepatitis B infection [8-10].

Conclusion

In conclusion, the case reported describes successful management of psoriasis by secukinumab without

reactivation of HBV. Additional safety data are needed to further assess secukinumab treatment in patients with a history of both psoriasis and HBV.

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