Correspondence

Septic Bursitis, a Potential Complication of Protease Inhibitor Use in Hepatitis C Virus

To the Editor—Telaprevir and boceprevir are protease inhibitors approved by the Food and Drug Administration for use in the treatment of genotype 1 chronic hepatitis C virus (HCV) infection. Common adverse events associated with boceprevir are anemia and dysgeusia, whereas rash and anemia are associated with telaprevir [1, 2]. We report 2 cases of infectious bursitis in patients undergoing therapy with protease inhibitors, and propose that this adverse event may be associated with this class of medication.

Patient 1 is a 57-year-old Hispanic man coinfected with human immunodeficiency virus (HIV) and HCV. He is currently on tenofovir, emtricitabine, and raltegravir and has a CD4 count of 356 cells/mm³ and undetectable HIV load. His HCV genotype 1a is complicated by cirrhosis. He started telaprevir, pegylated interferon (peg-IFN), and ribavirin (RBV) in March 2012 and HCV was undetectable by week 4. At week 8, he developed an erythematous maculopapular rash on his trunk and extremities without mucosal involvement (Figure 1). He did not improve on topical clobetasol and triamcinolone and was prescribed a 5-day course of methylprednisolone. Telaprevir was discontinued. At week 9, the rash became consistent with erythema multiforme. The patient reported right knee erythema, edema, and tenderness but was able to bear weight. He was instructed to discontinue peg-IFN and RBV and was started on oral prednisone 60 mg/day and amoxicillin–clavulanic acid for suspected cellulitis. At week 10, exam and knee radiographs demonstrated suprapatellar joint effusion and the patient underwent incision and drainage of pus, which grew methicillin-sensitive Staphylococcus...
aureus. He was discharged on oral dicloxacillin.

Patient 2 is a 56-year-old white man with HCV genotype 1b complicated by cirrhosis. He started treatment with boceprevir, peg-IFN, and RBV in February 2012 and had an undetectable viral load at week 17. At week 42, he developed left knee erythema, edema, and tenderness. He was assessed in the orthopedics clinic and diagnosed with cellulitis. Because of a penicillin allergy, oral levofloxacin was prescribed for an initial 10 days, but continued for 10 days because of persisting symptoms. At week 45, an ultrasound confirmed the diagnosis of prepatellar bursitis. A course of oral clindamycin resolved his symptoms without surgery.

Infectious complications were noted in up to 2% of patients enrolled in protease inhibitor clinical trials [1–5]. The results of the French early access program (ANRS CO20 CUPIC) showed that real-world infectious complications were 2.4% for boceprevir and 6.5% for telaprevir in cirrhotic patients [6]. Septic bursitis was reported in 1 of 117 patients (0.85%) in a rollover study of telaprevir from 3 phase II (PROVE) studies [7]. Septic bursitis was not observed in the placebo population. With septic bursitis accounting for 0.01%–0.1% of hospital admissions, this incidence of 0.85% exceeds that of the general population [8]. A phase II trial of 46 treatment patients with HCV genotype 1 using tegobuvir, the protease inhibitor GS-9256, peg-IFN, and RBV reported 1 case of infectious bursitis. This was considered to be unrelated to the study drug [9].

We propose that infectious bursitis may be an emerging adverse event associated with the HCV protease inhibitor drug class. Healthcare providers should be aware of this potential complication and be prepared for early intervention.

Notes

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