LETTER TO THE EDITOR

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Rifampicin-Induced Toxic Hepatitis in a Patient with Hemophilia After Chemical Synovectomy

Bir Hemofili Hastasında Kimyasal Sinovektomi Sonrası Rifampisin ile İlişkili Toksik Hepatit

Mehmet Can Uğur[1], Semih Aydoğdu[2], Elcil Kaya Biçer[2], Can Balkan[3], Kaan Kavaklı[3]

[1]İzmir Bakırçay University, Çiğli Training and Research Hospital, Clinic of Hematology, İzmir, Türkiye
[2]Ege University Faculty of Medicine, Department of Orthopedics and Traumatology, İzmir, Türkiye
[3]Ege University Faculty of Medicine, Department of Pediatric Hematology, İzmir, Türkiye

To the Editor,

Chemical synovectomy with rifampicin has the potential to be an important option because the radioactive agents required for radioisotope synovectomy are not available in Türkiye [1,2]. For countries where radioisotope synovectomy cannot be performed, chemical synovectomy with intraarticular rifampicin may be an easy, inexpensive, and successful treatment option. It seems to be more effective when used in small joints such as the elbow and ankle rather than the knee joint, which requires large volumes [3].

We planned to administer 250 mg of rifampicin (with 3-5 mL of lidocaine) for the ankle and elbow and 500 mg of rifampicin (with 7-10 mL of lidocaine) for the knee joint intraarticularly at 2-week intervals until treatment response [4]. Treatment response was determined as reduction in joint pain, improvement in joint function, and regression in synovitis. It was evaluated 1 month after the first injection or after at least 2 injections. We included patients whose synovitis was stage I-III and refractory to secondary prophylaxis for at least 6 months and who signed the treatment consent form.

Case: A 41-year-old patient with inhibitor-negative severe hemophilia A presented with recurrent bleeding in the right elbow. The patient had been receiving tertiary prophylaxis for the last 2 years. In the last 1 year, bleeding at the right elbow occurred three times a month (30-35 per year). The patient had a history of radioisotope synovectomy of the right elbow once in 2001. Physical examination of the right elbow revealed 20 degrees of flexion, 30 degrees of extension loss, swelling, and pain. The Hemophilia Joint Health Score (HJHS) 2.1 for a single joint was 9. A score of 60 was determined on a visual analog scale (VAS) for quality of life.

A total of 4 doses of 250 mg of rifampicin were administered. Two days after the last injection, the patient presented with the complaint of jaundice of the eyes. Total bilirubin was 4.9 mg/dL, direct bilirubin was 3.3 mg/dL, aspartate aminotransferase was 158 U/L, alanine transaminase 317 U/L, and alkaline phosphatase was 232 U/L. Abdominal ultrasonography revealed normal results. The patient did not receive any concurrent treatment that could cause hyperbilirubinemia. Although we did not have the opportunity to examine the serum rifampicin level, the case was evaluated as rifampicin-associated toxic hepatitis because we could not detect any cause. Follow-up was planned with a gastroenterological opinion. Liver function test results were followed closely. On the 12th day, the biochemistry values decreased to normal ranges.

In the 3rd month follow-up of this patient, joint movement limitation continued but the pain completely disappeared. There was no bleeding after the last injection. The HJHS 2.1 score for the right elbow was calculated as 7. The VAS score had increased to 90 points. After treatment, decreases in the number of bleedings and the HJHS 2.1 score and an increase in the quality-of-life score were observed.

Despite the regression of the patient's pain and improvement of the target joint with treatment, we thought that the development of toxic hepatitis despite the local use of rifampicin was related to systemic absorption from the intraarticular area. However, the symptoms resolved spontaneously without any other systemic side effects. No similar case report has been found in the literature.

Keywords: Hemophilia, Chemical synovectomy, Rifampicin, Toxic hepatitis

Anahtar Sözcükler: Hemofili, Kimyasal sinovektomi, Rifampisin, Toksik hepatit

Ethics

Informed Consent: The patient signed the treatment consent form.

Authorship Contributions

Surgical and Medical Practices: S.A., E.K.B.; Concept: M.C.U., C.B., K.K.; Design: S.A., K.K.; Data Collection or Processing: M.C.U., E.K.B.; Analysis or Interpretation: M.C.U., C.B., K.K.; Literature Search: M.C.U.; Writing: M.C.U.

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Address for Correspondence/Yazışma Adresi: Mehmet Can Uğur, M.D., İzmir Bakırçay University, Çiğli Training and Research Hospital, Clinic of Hematology, İzmir, Türkiye
E-mail : med.can@hotmail.com ORCID: orcid.org/0000-0002-5600-3169

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