

Correlation between Levaquin and Xarelto to development of Hematoma in the Lower Extremity



Dr. David Bernstein, DPM, Dr. Alexandra Scrimalli, DPM PGY3, Dr. Nikki Migliori, DPM PGY1, Dr. Carmelita Harbeson, DPM PGY2



Bryn Mawr Hospital, Main Line Health

Introduction

This is a retrospective case study of a patient who underwent simultaneous oral antibiotic therapy and anticoagulation for DVT prophylaxis who went on to develop symptoms of a DVT, which was later discovered to be a hematoma of the calf. The patient was a diabetic with impaired kidney function on antibiotic therapy for a lower extremity abscess. There is current literature detailing interactions between various antibiotics and anticoagulants causing side effects such as development of DVTs or hematomas.

Objectives

The purpose of our case study is to educate others on the possible side effects/interactions of combination antibiotic and anticoagulation therapy. Based on current literature and research, the combination of Levaquin with Xarelto producing hematoma is listed as a 1% possible side effect secondary to thrombocytopenia and vasodilation.



Results

Patient course: Patient was seen as an outpatient where he had an abscess incised and drained (I&D) as well as cultured in the office. After the I&D he was directly admitted to the hospital for a course of IV antibiotics and local treatment. Once the wound was stabilized and the proper antibiotics were administered the patient was sent home on Levaquin and resumed all home medications, including Xarelto. At follow up the patient complained of calf pain and was sent for an Ultrasound (US). Results of the US were negative for a DVT, however a hematoma was found during the diagnostic imaging. The only noted changes in his medications and activity was the Levaquin, it is suspected that the hematoma was triggered by the combination of the two medications.

Materials and Methods

Our patient was previously prescribed Xarelto by another physician. After five days of Levaquin for antibiotic therapy, he developed a calf hematoma which presented as a Deep Venous Thrombosis (DVT). After undergoing two venous ultrasounds, both of which were negative, it was suspected that the hematoma formed due to the combination of pharmacological medications rather than an underlying blood clot.

Conclusion

After reviewing the case and evaluating the patient's medical history as well as current medication regime, it is likely that the cause for the hematoma was related to drug interactions between Levaquin and Xarelto. It should be noted that side effects such as vasodilation, thrombocytopenia, and increased bleeding times are reported in up to 1% of patients taking Levaquin and Xarelto simultaneously. Due to the extensive past medical histories and comorbidities of our diabetic patient population, the subject of anticoagulation in combination with antibiotic therapy should be further

Resources

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