GENERALIZED PRURITUS INDUCED BY RIVAROXABAN

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Abstract

Introduction: Oral anticoagulants are essential for preventing stroke and pulmonary embolism in patients with atrial fibrillation. Rivaroxaban, a widely prescribed direct factor Xa inhibitor, has been associated with various dermatologic side effects, including pruritus, although rarely. While cutaneous side effects are relatively uncommon with Rivaroxaban, it is crucial to recognize such potential adverse effects to manage them effectively and maintain patient adherence to anticoagulation therapy. The patient's response to medication change highlights the need for awareness of drug-induced pruritus and the importance of appropriate management strategies.
Case Presentation: This report discusses a 65-year-old male with atrial fibrillation who developed generalized pruritus following the administration of Rivaroxaban. The patient did not have significant cutaneous lesions, known drug or food allergies, or any systemic disease that could explain his symptoms. His condition improved after switching to Apixaban and starting treatment with an oral antihistamine.
Conclusion: Given the impact of pruritus on quality of life and the risk of discontinuing essential medication, identifying the causes of drug-induced pruritus is critical. This case underscores the importance of considering a detailed drug history in patients presenting with unexplained pruritus and suggests that clinicians remain vigilant about the less common side effects of newer anticoagulants like Rivaroxaban. Further research is needed to elucidate the mechanisms underlying drug-induced pruritus and to optimize management strategies for affected patients.

Keyword: anticoagulants, drug -induced pruritus, antihistaminic drugs.

PRURITI I GJENERALIZUAR I INDUKTUAR NGA RIVAROXABAN

Abstrakt

Hyrje: Antikoagulantët oralë janë thelbësorë për parandalimin e insultit cerebral dhe embolise pulmonare, në pacientët me fibrilacion atrial. Rivaroxaban, një frenues i drejtpërdrejtë i faktorit Xa i përshkruar gjerësisht, është shoqëruar me efekte të ndryshme anësore dermatologjike, duke përfshirë pruritin, megjithëse rrallë. Ndërsa efektet anësore të lëkurës janë relativisht të rralla me Rivaroxaban, është thelbësore të njihen këto efekte të mundshme negative, për t'i menaxhuar ato

në mënyrë efektive, dhe për të ruajtur pacientin ndaj terapisë antikoaguluese. Përgjigja e pacientit ndaj ndryshimit të mjekimit nxjerr në pah nevojën për ndërgjegjësim për pruritin e shkaktuar nga medikamentet dhe rëndësinë e strategjive të duhura të menaxhimit.

Prezantimi i rastit: Nje mashkull 65-vjeçar me fibrilacion atrial, zhvilloi prurit të gjeneralizuar pas administrimit të Rivaroxaban. Pacienti nuk kishte lezione të rëndësishme të lëkurës, alergji të njohura ndaj ilaçeve ose ushqimeve, ose ndonjë sëmundje sistemike që mund të shpjegonte simptomat e tij. Gjendja e tij u përmirësua pas kalimit në Apixaban dhe fillimit të trajtimit me antihistaminike orale.

Përfundim: Duke pasur parasysh ndikimin e pruritit në cilësinë e jetës, identifikimi i shkaqeve të pruritit të shkaktuar nga ilaçet është e rëndësishme. Ky rast nënvizon rëndësinë e marrjes parasysh të një historie të detajuar të barnave në pacientët që paraqiten me prurit të pashpjegueshëm dhe sugjeron që mjekët të qëndrojnë vigjilentë për efektet anësore më pak të zakonshme të antikoagulantëve më të rinj si Rivaroxaban. Nevojiten kërkime të mëtejshme për të sqaruar mekanizmat, që qëndrojnë në themel të pruritit të induktuar nga ilaçet dhe për të optimizuar strategjitë e menaxhimit për pacientët e prekur.

Fjalë kyce: astma e rëndë, sëmundje, sindromë, komorbiditet.

Introduction

Oral anticoagulant is an imperative therapy in patients with atrial fibrillation episodes to prevent stroke or pulmonary embolism events (1). Rivaroxaban is one of the most prescribed medications in this category. According to the product monograph, various dermatologic side effects have been reported in the literature, with pruritus being 1.8% of cases (2). Here, we will discuss a case of drug-induced pruritus and proper management with two important implications: safety and improving quality of life.

Case report

We present a case of a 65-year-old male patient with generalized pruritus without significant cutaneous lesions. He was admitted to the Dermatology Service to investigate the causes of his complaints. The patient's history was associated with an intense, generalized pruritus, which he had been suffering from for several months. He stated that these complaints started after the Rivaroxaban administration to treat atrial fibrillation. The pruritus was never associated with hypersensitivity syndrome or angioedema. The patient claimed no known drug or food allergies. His personal history included benign prostatic hyperplasia, and he was currently undergoing treatment with Tamsulosin and Dutasteride. His physical examination was normal except for post-inflammatory hyperpigmentation and excoriations. Otherwise, the patient underwent laboratory and imaging examinations to exclude systemic diseases as potential and serious causes of pruritus. According to the hematologist, the complete blood count revealed anemia and some alterations of leukocytes and thrombocytes, which were unrelated to any malignant hematology disorder. The renal, hepatic, thyroid, and autoimmune results were within the

reference range. Chest radiography, prostate, and abdominal echography found no structural abnormalities. Since we could not find any abnormality or other drug to explain the itching, we were convinced it was a consequence of the newly started medication. We asked the cardiologist to switch the oral anticoagulant in order to maintain a safe profile of his cardiac disease as well as to stop the itching process. After the Apixaban and oral antihistamine administration, the complaints were relieved.

Discussion

Rivaroxaban is the first agent available within a new class of anticoagulants called direct factor Xa inhibitors. It is preferred to warfarin because of its better pharmacokinetics that allows simplified management (3). Cutaneous manifestations related to Rivaroxaban are relatively uncommon. In the literature, we could find various studies that report accompanying dermatological manifestations such as pemphigoid bullous-like lesions (4), hypersensitivity syndrome (5), DRESS syndrome (6), erythema multimorfe (7), and serum sickness reaction (8).
Drug-induced pruritus, often experienced as an uncontrollable need to scratch, is triggered by a variety of medications and accounts for about 5-10% of all reported drug side effects. Commonly referred to as itching, pruritus can significantly lower life quality and add psychological, social, and economic strains on affected individuals. Addressing pruritus is crucial because it can increase the risk of patients stopping their treatment, which can worsen their primary health condition (9-11).
In the case described, Rivaroxaban appears to be the sole likely cause of the generalized pruritus. The patient had been taking Tamsulosin and Dutasteride for a period of time and had not reported any adverse effects. While Dutasteride is not commonly associated with causing pruritus, Tamsulosin has been infrequently linked to allergic dermatitis that includes pruritus as a symptom. Moreover, the symptoms of itching improved after discontinuing Rivaroxaban. Thus, other medications being used concurrently were ruled out as culprit agents. Furthermore, the Naranjo Adverse Drug Reaction scored 5 points, which makes the causality of medication-induced pruritus probable (12).
There are limited reports connecting Rivaroxaban to pruritus. Nassif et al. reported instances of two male patients, both older than 60 and with atrial fibrillation, who experienced pruritus following the use of Rivaroxaban (13). Similar to the situation described in our report, their treatment was changed to Apixaban, supplemented with an oral antihistamine, which led to an improvement in their pruritus symptoms.
We encouraged our patient to report any issues, noting that Apixaban has been linked to cutaneous hypersensitivity syndrome in some cases (14). Six months after switching to Apixaban, the patient has not experienced any adverse effects.
Gaining a deeper understanding of the causes of drug-induced pruritus is critical for improving clinical management and treatment decisions. However, the exact mechanisms causing drug-induced pruritus, including Rivaroxaban, remain unclear. Further researches are needed to explain the pathological mechanisms underlying pruritus in these patients.

Conclusion

Given the impact of pruritus on quality of life and the risk of discontinuing essential medication, identifying the causes of drug-induced pruritus is critical. This case underscores the importance

of considering a detailed drug history in patients presenting with unexplained pruritus and suggests that clinicians remain vigilant about the less common side effects of newer anticoagulants like Rivaroxaban. Further research is needed to elucidate the mechanisms underlying drug-induced pruritus and to optimize management strategies for affected patients.

Conflict of Interest. None.

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