



Acute Urticaria Secondary to Ofloxacin in a Pediatric Patient

A Case Report

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Abstract: Urticaria, commonly known as hives is an erythematous, raised, usually itchy skin eruption. This condition can be due to several factors, and one of the causes is the use of medicines. Hypersensitivity reactions to ofloxacin have been reported and one of them is urticaria which is a fluoroquinolone antibiotic. The following is a clinical case of acute urticaria in a 10-year-old female who developed an itchy rash with generalized distribution and a history of fever, diarrhea, and vomiting. This case emphasizes the need to identify Ofloxacin-induced urticaria and avoid the agent that caused the reaction to prevent the worsening of symptoms.

Keywords: Urticaria, Erythematous, Hypersensitivity, Ofloxacin, Fluoroquinolone.

I. INTRODUCTION

Urticaria, additionally called hives, is a commonplace dermatological situation characterized by temporary, itchy, erythematous papules or wheals that may be introduced by using several matters, along with infections, meals, and pills. (1, 2) Drug-brought urticaria is mainly risky because it may get worse and result in extremely hypersensitive reaction occasions that need to be handled properly away, like angioedema and anaphylaxis. (3,4) Fluoroquinolones, which include ofloxacin, are frequently used antibacterial drug treatments due to their large-spectrum effectiveness in opposition to a lot of bacterial illnesses. Nevertheless, hypersensitivity reactions also are linked to these medicinal drugs, with urticaria being an outstanding side impact. (5, 6) IgE-mediated hypersensitivity pathways are largely identified to have a role within the etiology of fluoroquinolone-caused urticaria. (7, 8) Pediatric sufferers' underdeveloped immune systems and challenges in correctly reporting their signs and symptoms cause them to be especially liable to drug-prompted allergy responses. (9, 10) Ofloxacin has a properly established record of inflicting hypersensitive reaction reactions in children, which requires direct forestall and cautious control. (11, 12) Early detection and intervention are important for the management of drug-brought-on urticaria in pediatric sufferers to save you the improvement of extra extreme reactions. (13, 14) It is vital to become aware of signs right away for effective remedy, as youngsters may also find it hard to express their problems. (15, 16) To avoid critical results, it is also important to educate caregivers on how to become aware of signs and symptoms and comprehend emergency protocols. (17, 18) This article describes a ten-year-old woman of Indian descent who advanced acute urticaria after receiving ofloxacin-tinidazole. Along with a temperature and gastrointestinal

signs and symptoms like vomiting and diarrhea, the affected person also had an itching rash. Multiple pectinate maculopapular rashes have been discovered at some point in the clinical exam, which led to the prognosis of drug-brought on urticaria. This instance emphasizes how vital it is to pick out and treat pediatric patients drug-brought about urticaria as quickly as possible. (19, 20) The want of accurately classify and manage urticaria, thinking of both medical and immunological viewpoints, has been emphasized by the latest suggestions and research. (21, 22) Effective healing techniques are important in controlling urticaria, as histamine launch and H1-antihistamine healing procedures are vital in this regard. (23) Advances in diagnostic and therapeutic strategies have brought about a massive evolution in our information of urticaria and angioedema. (24, 25) Moreover, improving patient results requires an intensive strategy for treating medicinal drug-hypersensitive reactions that consist of non-beta-lactam antibiotics. (26, 27) Appropriate control strategies are required to decrease unfavorable medicinal drug reactions and enhance the first-rate of life for folks who are impacted. (28, 29) A framework for the analysis, categorization, and control of urticaria is provided with the aid of the EAACI/GA2LEN/EDF/WAO tips, ensuring a uniform approach to patient care. (30)

II. Case Presentation:

A 10-year-old girl suffering from fever, loose stools, and 2 episodes of vomiting for 2 days was prescribed an ofloxacin-tinidazole tablet by a physician in a local hospital. After a day of administration of antibiotics, arrived at the out-patient department and presented with symptoms like itchy rashes all over the body for 2 days. Upon investigation, multiple erythematous plaques were seen over the arms, forearms, neck, and abdomen.

Diagnosis: Acute urticaria secondary to ofloxacin



III. Treatment Summary:

The management involved the removal of ofloxacin prescription from the patient. Increased awareness for features of severe hypersensitivity reactions were explained to the patient and informed that she has to report to the emergency department in case has swelling of the eyelids, lips or develops difficulties in breathing. After ceasing the period of taking Ofloxacin, the patient started to reduce her symptoms gradually. Thus, when the medication was withdrawn there were no apparent manifestation of rash, swelling or difficulty in breathing. The patient was advised not to take ofloxacin again and any other related medicine in future and the any new medicine which she has to take should consult the doctor only.

IV. Discussion:

Antibiotic agents particularly the Penicillin, Cephalosporins and fluoroquinolones are common causes of Drug induced urticaria. There are reports of hypersensitivity reactions with ofloxacin, which is a fluoroquinolone drug; some of the reactions include urticaria, angioedema and in severe cases anaphylaxis (3). This case cautions other healthcare providers to always be alert in as much as diagnosing drug-induced urticaria and ensure that the concerned drug is stopped immediately.

Here, since the patient presented with fever looser stools, and vomiting it was due to an infective cause and the prescription of ofloxacin–tinidazole was thus appropriate. The resultant development of an itchy rash and erythematous plaques and finding of such on examination led to the diagnosis of acute urticaria due to ofloxacin. It was important to stop the administration of the drug immediately and to inform the patient on how she could identify serious signs of hypersensitivity.

V. Conclusion:

A particular focus is made to underline the early diagnosis and the correct management of drug-induced urticaria. Health caregivers ought to be vigilant on signals of medication-related adverse effects and ensure that the patients are well informed of the possible risks of the administered drugs. The management and prevention strategies of severe hypersensitivity reactions entail the halt of the offending agent, patient education, and control of the reaction promptly.

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