

Diclofenac- Induced Allergy A Case Report

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Abstract

NSAIDs are commonly used drugs in the treatment of pain of different types and in various inflammatory conditions as well as blood thinners for prophylaxis in patients of MI. Aspirin, Ibuprofen and diclofenac are the most commonly associated with urticarial angioedema. Urticarial angioedema is a rare adverse effect occurring with an incidence of 0.1 to 0.3 % and incidence increases with age. Early recognition and discontinuation of the drug is important. Anti-histamines and corticosteroids are used in the management of urticarial angioedema.

Keywords: Diclofenac, Urticarial Angioedema, Corticosteroid

Introduction

NSAIDs are the most commonly used drugs in the treatment of pain of different types. These drugs are well tolerated with few side effects. Urticarial Angioedema is a rare adverse effect occurring with an incidence of 0.1 to 0.3 %. coexistence of urticaria with angioedema is uncommon. Aspirin, Ibuprofen and diclofenac are the most common NSAIDs drugs

associated with angioedema. Angioedema is an abrupt swelling of the skin, mucous membranes of the face, lips, mouth, larynx, extremities and genitalia². Allergic urticarial angioedema is a hypersensitivity reaction to various causes such as drugs, foods, insect stings¹. We report a case of diclofenac induced urticarial angioedema.

Case Report

A 21 years old male who underwent Bilateral Fibrotomy and reconstruction with buccal pad of fat for treatment of oral submucous fibrosis, presented with complaints of diffuse oral pain for which injection diclofenac 2c.c intramuscular was administered. Twenty minutes after the administration of injection diclofenac sodium, he developed severe itching over the cheeks, and over the neck .This was followed by rash, redness and urticaria all over the face, over the lateral side of neck (as shown in fig 1 and fig 2) and all over the body. He did not give any history of allergy to medication nor history of similar complaints in the past. Physical examination was normal except for erythema and multiple annular

wheals all over the body including face. He was treated with injection Chlorpheniramine maleate 2cc. followed by injection dexamethasone 2c.c. Rash, urticaria and swelling reduced after 5 days of treatment. His laboratory investigations at the time of admission were Neutrophilic Leucocytosis with Eosinophilia.

(WBC-12000, Neutrophils -84%,(normal 30-70%), Eosinophils -08%(normal 1-6%), Absolute eosinophil count(AEC)-778 cells/cu mm(normal 40-400 cells/cu mm. Other laboratory investigations were normal.He was discharged after one week on complete recovery.



Figure-1



Figure-2

Discussion

Urticarial angioedema is known side effect of non-steroidal anti-inflammatory drugs. It is generally self limiting but may sometimes result in respiratory tract obstruction, which can prove fatal. Less severe reactions subside with medical treatment but severe reactions may require tracheostomy (or) intubation³. Diclofenac induced urticarial angioedema may be caused due to blockade of cyclooxygenase pathway which results in increased production of leukotrienes.urticaria with angioedema has been reported rarely. Early recognition and discontinuation of responsible drugs remains the main stay of treatment in NSAIDS induced urticarial angioedema. Deepa et al⁴reported a similar case of urticarial angioedema in a 13 year old boy,which was treated with corticosteroids and antihistamines.

In a case report by Hedar A et al. in 2010, a 39 years old women, developed angioedema and profound hemodynamic shock after receiving a diclofenac suppository for analgesia 6 hours after cesarean section⁵.

In another case report by Tiwari AK et al. in 2013, patient who was injected with diclofenac sodium 50 mg intramuscular, developed chest pain and pruritis over the lip with redness and wheal over the site of injection. ECG showed ST-segment elevation in leads II, III and AVF, diagnosed as ST segment elevation myocardial infarction of inferior wall. This is referred to as Kounis syndrome, which was characterized by chest pain and allergic reaction. This can be substantiated by clinical and laboratory findings of classic angina pectoris including release of inflammatory mediators⁶.

Conclusion

NSAIDS and Antimicrobial agents are two major group of drugs involved in the causation of angioedema⁷ and

urticarial rash. Generally angioedema is self limiting but sometimes can be fatal. So early recognition and discontinuation of the responsible drug is important. Usually treatment includes corticosteroids and anti-histamines . Physicians should be aware of the possibility of angioedema with urticaria while prescribing NSAIDS.

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