

Ketorolac induced bullous pemphigoid in a young woman- A case report

Sheema Ali*; M Prasanna Kumari; Umme Thahira Khatoon

***Corresponding Author(s): Sheema Ali**

Department of Clinical Pharmacy & Pharm.D, Vaagdevi College of Pharmacy, Warangal, India.

Phone: +91-7702-750-472; Email: sheemaaliwork@yahoo.com

Abstract

Adverse drug reactions are unwanted or unintended reactions which result from drug use and it is a major cause contributing to high morbidity and mortality. Bullous Pemphigoid is a type of chronic blistering type of autoimmune disorder which commonly affects older people and is less common in younger adults. Here we are presenting a case report of Ketorolac induced Bullous Pemphigoid (BP) in a 31-year-old female, who was prescribed the medication due to complaints of pain in multiple joints. She developed a bullous eruptions all over the body, on the 15th day of drug administration after having had persistent urticarial rashes on the body. Later she consulted a dermatologist and a, biopsy examination was consistent with the condition. The drug was immediately discontinued and symptomatic treatment was given. After removal of the drug, the patient's bullae resolved within 2 weeks.

Keywords

Adverse drug reaction; autoimmune; blisters; bullous pemphigoid; ketorolac.

Introduction

Bulla is a vesicle larger than 0.5 cm. They may be superficial within the epidermis or situated below the dermis [1]. Bullous Pemphigoid is a type of chronic blistering type of autoimmune disorder which is more commonly seen in older people and seldom in younger adults [2-5]. The pathophysiology includes involvement of immunological and inflammatory auto- antibodies. These auto- antibodies activate complement, mast cells and stimulate eosinophils and neutrophils to release inflammatory cells [6-7]. On the other hand, bullous pemphigoid may also present as an adverse effect of drugs like PD-1/PD-L2 inhibitors, NSAID'S, diuretics (furosemide, spironolactone), gliptins and TNF- alpha inhibitors. The present case report highlights the adverse effect of ketorolac induced bullous pemphigoid in a young woman.

Case Report

A 31-year-old female visited a rheumatology & orthopedic centre with complaints of pain in multiple joints, with a history of small joint involvement and generalized malaise of 6 months duration. The patient was prescribed the NSAID Ketorolac- 10mg/TID and multivitamins. After 15 days of drug use, the patient developed a bullous eruption all over the body (Figure 1 & 2) with fever. She was then referred to a dermatology clinic and the biopsy results were consistent with bullous pemphigoid. The drug was immediately withdrawn and symptomatic treatment was given to the patient. Prior to bullae formation she gave a history of severe urticaria, redness and then she developed the bullous eruption on the body. However, after withdrawal of the drug and symptomatic treatment with Clobetasol, Paracetamol, and Multivitamins, the patient was relieved from her symptoms in 2 weeks.



Figure 1: Bullous eruption on the trunk



Figure 2: Bullous eruption on the neck

Discussion

We present this case of Ketorolac induced Bullous Pemphigoid in a young woman and it was seen in the initial days of the drug use. The patient recovered from her symptoms after the withdrawal of the drug and symptomatic treatment. She was advised not to use this medication again for any future problem. We hereby conclude that healthcare providers should take a brief history of the patient and every patient should be educated and counseled about these signs and symptoms to avoid further progression of these adverse reactions.

References

1. Buxton PK, Morris-Jones R, editors. ABC of Dermatology. John Wiley & Sons. 2013.
2. Bernard P, Vaillant L, Labeille B, Bedane C, Arbeille B, Denoeux JP, et al. Incidence and distribution of subepidermal autoimmune bullous skin diseases in three French regions. Archives of dermatology. 1995; 131: 48-52.
3. Marazza G, Pham HC, Schärer L, Pedrazzetti PP, Hunziker T, Trüeb RM, et al. . Incidence of bullous pemphigoid and pemphigus in Switzerland: a 2-year prospective study. Br J Dermatol. 2009; 161: 861-868.

4. Jung M, Kippes W, Messer G, Zillikens D, Rzany B. Increased risk of bullous pemphigoid in male and very old patients: a population-based study on incidence. *J Am Acad Dermatol.* 1999; 41: 266–268.
5. Kridin K. Subepidermal autoimmune bullous diseases: overview, epidemiology, and associations. *Immunologic research.* 2018 Feb 1;66: 6-17.
6. Giudice GJ, Emery DJ, Diaz LA. Cloning and primary structural analysis of the bullous pemphigoid autoantigen BP180. *Journal of Investigative Dermatology.* 1992; 99: 243-250.
7. Stanley JR, Tanaka T, Mueller S, Klaus-Kovtun V, Roop D. Isolation of complementary DNA for bullous pemphigoid antigen by use of patients' autoantibodies. *The Journal of clinical investigation.* 1988; 82: 1864-1870.

Manuscript Information: Received: October 10, 2019; Accepted: February 10, 2020; Published: February 14, 2020

Authors Information: Sheema Ali^{1*}; M Prasanna Kumari²; Umme Thahira Khatoon³

¹Department of Clinical Pharmacy, Vaagdevi College of Pharmacy, Warangal, India.

²Department of Dermatology & Venereology and Leprosy, Kakatiya Medical College, Warangal, India.

³Department of Metallurgical and Materials Engineering, National Institute of Technology, Warangal, India.

Citation: Ali S, Kumari MP, Khatoon UT. Ketorolac induced bullous pemphigoid in a young woman: A case report. *Open J Clin Med Case Rep.* 2020; 1629.

Copy right statement: Content published in the journal follows Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>). © **Ali S 2020**

About the Journal: Open Journal of Clinical and Medical Case Reports is an international, open access, peer reviewed Journal focusing exclusively on case reports covering all areas of clinical & medical sciences.

Visit the journal website at www.jclinmedcasereports.com

For reprints and other information, contact info@jclinmedcasereports.com