



CASE REPORT

A Rare Case Report of Localized Bullous Fixed Drug Eruption Due to Tamsulosin

Sheba Mariam Jacob, Thillaikarasi A, Narasimhalu C.R.V, Vimal Chander R*

Abstract

Fixed drug eruption is a cutaneous adverse reaction to a specific drug. Tamsulosin is an alpha-1 adrenergic receptor blocker used to treat benign prostatic hyperplasia in men. We report a case of 55 year old man with benign prostatic hyperplasia who came with bullous eruption on the fingers of his left hand after 3 weeks of using Tab. Tamsulosin 0.4 mg once daily at night. Two cases of fixed drug eruption due to Tamsulosin have been reported in literature before and therefore cutaneous adverse effect of tamsulosin should be kept in mind while prescribing the drug.

Keywords

Adverse drug reaction, Fixed drug eruption, bullous drug eruption, Tamsulosin

Introduction

Fixed drug eruption is a type of delayed hypersensitivity reaction characterized by recurrence of lesion at the same site upon re-exposure to an offending drug.^[1] The term fixed drug eruption was introduced by Brocq in 1894. They account for 4-39% of all drug eruptions.^[2] It usually presents as an annular erythematous plaque which can evolve to a vesicular or bullous form. It typically presents after 1-2 weeks of drug exposure but repeated intake can cause a reaction within 30 minutes.^[1]

Case Report

A 55 year old male, farmer by occupation had been referred to us for fluid filled lesion of all the finger tips of the left hand. The patient was on Tab. Tamsulosin 0.4 mg once daily at night for three weeks as he was diagnosed to have benign prostatic hyperplasia. Patient gave history of similar lesion over the thumb one month back for

which he was treated conservatively. He was asymptomatic without any mucosal lesion. He did not have any comorbidities. On examination of left hand, the palmar aspect of the 2nd, 3rd and 4th finger tips showed bullae of size 2 X 2 cm. (Fig 1) No erythema was noted. Differential diagnosis of bullous drug eruption and blistering distal dactylitis were made. Fluid was aspirated for bacterial culture study which showed no organisms. A punch biopsy was taken from the left thumb. The pathology revealed hyperkeratosis and subcorneal vesicle containing eosinophils and evidence of necrosis. Whole dermis showed inflammatory cell infiltrate composed of numerous eosinophils, (Fig 2) lymphocytes and plasma cells. These features were consistent with bullous drug eruption. Routine blood investigations showed increase in ESR of 35mm/hr. Based on the treatment

Departments of Dermatology and *Pathology, Saveetha Medical College and Hospital, Thandalam, Chennai, India

Correspondence to: Dr Sheba Mariam Jacob, Post graduate Department of Dermatology, Saveetha Medical College and Hospital, Thandalam, Chennai 602105, Tamil Nadu, India

Manuscript Received: 24.08.2022; Revision Accepted: 12.11.2022;

Published Online First: 10 July, 2023

Open Access at: <https://journal.jkscience.org>

Copyright: © 2023 JK Science. This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License, which allows others to remix, transform, and build upon the work, and to copy and redistribute the material in any medium or format non-commercially, provided the original author(s) and source are credited and the new creations are distributed under the same license.

Cite this article as: Jacob SM, Thillaikarasi A, Narasimhalu CRV, Vimal Chander RV. A Rare Case Report of Localized Bullous Fixed Drug Eruption Due to Tamsulosin. JK Science 2023;25(3):178-79.



Fig 1. Bullous eruption on the 2nd, 3rd and 4th fingers of the left hand

history, the drug was found to be Tab. Tamsulosin. Patient was advised to discontinue the drug and a five day course of oral corticosteroid and antihistamines were given. The lesions resolved after one week of discontinuing the drug. Causality assessment done by the Naranjo scale graded the reaction as probable drug reaction to Tab. Tamsulosin.

Discussion

Bullous fixed drug eruption (BFDE), a rare variant of FDE. It is characterized by either localized or generalized blisters.^[3] BFDE affects male and female equally without gender predominance.^[4] The most commonly involved sites are the lips, genitals, arms, abdomen, hands and face.^[5] Drugs like ciprofloxacin, acetaminophen, fluconazole, metronidazole have been reported to cause bullous FDE.^[6] The offending drug acts as a hapten and binds to the basal keratinocytes and initiate inflammatory response.^[7] Memory T cells play an important role in re-activation of lesions on re-exposure to the offending drug. Variants like pigmented, non-pigmented, generalized, linear, bullous, eczematous, vulvitis, and psoriasiform forms have been described.^[8] The histopathological examination in BFDE shows numerous, isolated or confluent and eosinophilic keratinocyte necrosis.^[3] Oral provocation test is the gold standard test to diagnose localised bullous fixed drug eruption but should not be done if there is risk of progression to generalised BFDE. Patch testing with the drug is an alternative method of diagnosis.^[2] The definitive treatment is to stop the offending drug. Tamsulosin is an alpha adrenergic receptor blocker used to treat benign prostatic hyperplasia. The common side effects are dizziness and headache. Other cutaneous side effects reported include photosensitive rash

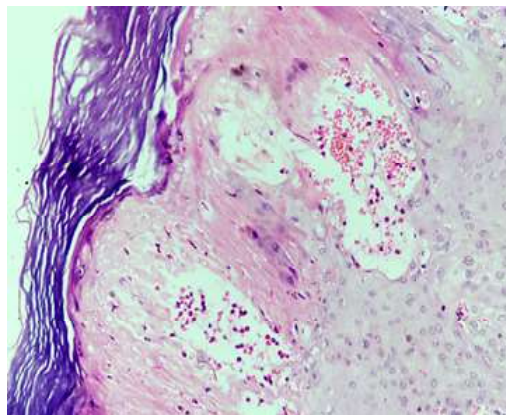


Fig 2. section showing hyperkeratosis and subcorneal vesicles containing eosinophils [H & E 40X]

^[9] and erythema multiforme.^[10]

Conclusion

Tamsulosin is widely used by urologist for both prostatic hyperplasia and renal calculi. Hence, adequate awareness and appropriate measures have to be instituted about this adverse drug effect so as to aid in its timely diagnosis and treatment.

References

1. Montazer F, Jahani Amiri K, Mofarrah R, Ahmadi A, Nouripour B, Mofarrah R. A first case of fixed drug eruption due to Tamsulosin. *J Cosmet Dermatol* 2019;19(5) 1143-45.
2. Michael R, Ardern J, Lee HY. Benign Cutaneous Adverse Reactions to Drugs. In: Robert Chalmers, Jonathan Barker, Christopher Griffiths, Tanya Bleiker, Daniel Creamer, editors. *Rook's Textbook of Dermatology*, Volume 1, 9th edition. UK: Wiley-Blackwell; 2016 .pp.118.12.
3. Zaouak A, Ben Salem F, Ben Jannet S, Hammami H, Fenniche S. Bullous fixed drug eruption: A potential diagnostic pitfall: a study of 18 cases. *Therapie* 2019 ;74(5):527-30.
4. Sharma VK, Dhar S. Clinical pattern of cutaneous drug eruption among children and adolescents in north India. *Pediatr Dermatol* 1995 ;12(2):178-83.
5. Pratik Gahalaut, Emy Alexander. Azithromycin in Acne: A Protagonist for Fixed Drug Reaction. *Indian J Dermatol* 2008;53(2):100-1
6. Das A, Sancheti K, Podder I, Das NK. Azithromycin induced bullous fixed drug eruption. *Indian J Pharmacol* 2016 ;48:83-5.
7. Ozkaya-Bayazit E, Bayazit H, Ozarmagan G. Drug related clinical pattern in fixed drug eruption. *Eur J Dermatol* 2000 ;10(4):288-91.
8. Nair PA. Ciprofloxacin induced bullous fixed drug reaction: Three case reports. *J Fam Med Primary Care* 2015 ;4 :269-72.
9. Tan CK, Yap KB. Tamsulosin?induced photosensitivity rash. *Singapore Med J* 2018 ;59(6):336?337.
10. Hu, Lei, Dong, Jing, Zhang, Shaohui. Tamsulosin-Associated Erythema Multiforme-Like Eruption, *American Journal of Therapeutics* 2020;27(6):700-701.