

Case Report

Blistering eruptions following isotretinoin therapy for hidradenitis suppurativa: a case report

Ehiaghe L. Anaba*, Ruth I. Oaku

Department of Medicine, Lagos State University Teaching Hospital, Lagos, Nigeria

Received: 23 November 2018

Accepted: 29 December 2018

***Correspondence:**

Dr. Ehiaghe L. Anaba,

E-mail: ehianaba@yahoo.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

A 33-year-old male was treated with isotretinoin (20mg daily) for hidradenitis suppurativa. After 6 weeks on the medication, he developed symmetrical erythematous tense blisters on the lower legs. Report of biopsy done was of intraepidermal blisters with superficial dermal lymphohistiocytic infiltrates. He was commenced on oral prednisolone 30mg daily and Isotretinoin was withdrawn. The blisters resolved over a 2week period. The lesions of hidradenitis suppurativa were noticed to have improved with the short course of isotretinoin.

Keywords: Blistering eruptions, Isotretinoin

INTRODUCTION

Isotretinoin is a cis-retinoid readily used in dermatology for the treatment various skin diseases including of acne, hidradenitis suppurativa, Gali Gali disease.^{1,2} We report a case of blistering eruptions following the use of Isotretinoin in the treatment of hidradenitis suppurativa.

CASE REPORT

A 33-year-old male presented to the dermatology outpatient clinic with lesions consistent with hidradenitis suppurativa in the groin and jaw areas. He was assessed to be Hurley stage 3. Despite various medications including combinations of antibiotics, the lesions were not much improvement, were persistently draining with consequent severe impairment of the patient's quality of life. He was commenced on a low dose of 20mg daily to allow for adjustment to the known dry lips and dry eyes that occurs with Isotretinoin with the intention of increasing the dose.

Six weeks after the commencement of isotretinoin, he developed bilaterally swollen legs and blisters and

malaise. Clinical examination revealed symmetrical weepy, swollen legs, erythematous patches and tense blisters with negative Nikolsky sign. These blisters were limited to the lower legs. He was not febrile nor pale. A clinical diagnosis of drug induced bullous pemphigoid was made (Figure 1 and Figure 2).

Biopsies of an erythematous patch and a blister were taken. Samples for complete blood count, ESR and serum E, U, Cr were also taken. Isotretinoin was discontinued, Prednisolone 30mg/day was commenced and daily potassium permanganate soaks was commenced. Two weeks following this, legs were no longer swollen nor weepy, blisters had resolved. Patient was feeling better and happy with the resolution. The lesions of HS were less swollen and no longer discharging (Figure 3).

Complete blood count, ESR and serum E, U, Cr were normal. Biopsy report (H and E) was of spongiosis, telangiectasia and lymphohistiocytic infiltrates in the erythematous patch and intraepidermal blister with superficial dermal lymphohistiocytic infiltrates in the

blister area. Due unavailability, immunofluorescence was not done.



Figure 1: Blistering eruptions. Symmetrical lower leg swelling, erythematous patches and blisters.



Figure 2: blistering eruptions. tense blisters.



Figure 3: Blistering eruptions. complete resolution of blisters.

DISCUSSION

Hidradenitis suppurativa (HS) is chronic inflammatory disease of the follicular structures, occurring commonly in the axillary, inguinal, intergluteal, perigenital, infra and intermammary gland areas.^{3,4} The true prevalence of HS is not known but prevalence is said to be 0.06 and 0.67% in some populations and HS is more common in people

of African descent.^{4,7-9} Treatment modalities of HS include combinations of antibiotics, Isotretinoin as used in our patient, biologic agents and lasers.^{3,4,10-13}

Isotretinoin is used for various dermatologic conditions; Acne, hidradenitis suppurativa, Gali, Darier's disease, palmo-plantar keratoderma, pityriasis rubra pilaris to name a few.^{1,2} The use of isotretinoin has been associated with common and uncommon cutaneous side effects. The common cutaneous side effects include; dry lips, xerosis, facial erythema, eye lesions.¹⁴ The documented uncommon side effects are recurrent herpes labialis, angioedema and urticaria, pyogenic granuloma, acute generalized exanthematous pustulosis, erythema nodosum, erythema multiforme.¹⁵⁻²⁰

Isotretinoin has not been reported in literature to be associated with blistering eruptions but rather has been used in the treatment of vesiculous prurigo pigmentosa.²¹ We have reported this case to draw attention of the occurrence of intraepidermal blisters with the use of isotretinoin.

This study has inability to carry out immunofluorescence due to unavailability and cost.

CONCLUSION

Isotretinoin though widely safely used can rarely be associated with blistering eruptions. Clinicians should be on the lookout for this.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Dupuy E, Alexanian S, Hsiao J. Galli-Galli Disease Responsive to Isotretinoin Treatment. *Int J Dermatol.* 2018;57:1123-4.
2. Sehgal VN, Srivastava G, Sardana K. Isotretinoin-unapproved indications/uses and dosage: a physician's reference. *Int. J. Dermatol.* 2006;45:772-7.
3. Patil S, Apurwa A, Nadkarni N, Agarwal S, Chaudhari P, Gautam M. Hidradenitis Suppurativa: Inside and Out. *Indian J Dermatol.* 2018;63:91-8.
4. Jansen T, Plewig G. Acne Inversa. *Int J Dermatol.* 1998;37:96-100.
5. Calao M, Wilson JL, Spelman L, Billot L, Rubel D, Watts AD, Jemec GBE. Hidradenitis suppurativa (HS) prevalence, demographics and management pathways in Australia: a population-based cross-sectional study. *PLoS ONE.* 2018;13:e0200683.
6. Davis SA, Lin HC, Balkrishnan R, Feldman SR. Hidradenitis suppurativa management in the united states: an analysis of the national ambulatory medical care survey and marketscan medicaid databases. *Skin Appendage Dis.* 2015;1:65-73.

7. Vaidya T, Vangipuram R, Alikhan A. Examining the race-specific prevalence of hidradenitis suppurativa at a large academic center; results from a retrospective chart review. *Dermatol Online J.* 2017;15:23.
8. Vlassova N, Kuhn D, Okoye GA. Hidradenitis suppurativa disproportionately affects African Americans: a single-center retrospective analysis. *Acta Derm Venereol.* 2015;95:990-1.
9. Lee DE, Clark AK, Shi VY. Hidradenitis suppurativa: disease burden and etiology in skin of color. *Dermatology.* 2017;233(6):456-61.
10. Scheinfeld N. Hidradenitis suppurativa: a practical review of possible medical treatments based on over 350 hidradenitis patients. *Dermatol Online J.* 2013;19:1.
11. Nickle SB, Peterson N, Peterson M. Updated physician's guide to the off-label uses of oral isotretinoin. *J Clin Aesthet Dermatol.* 2014;7:22-34.
12. Boer J. Are there indications for isotretinoin treatment of hidradenitis suppurativa? *Dermatol.* 2017;233:111-2.
13. Huang CM, Kirchof MG. A new perspective on isotretinoin treatment of hidradenitis suppurativa: a retrospective chart review of patient outcomes. *Dermatol.* 2017;233:120-5.
14. Brzezinski P, Borowska K, Chiriak A, Smigielski J. Adverse effects of isotretinoin: a large, retrospective review. *Dermatol. Ther.* 2017;30:4e12483.
15. Yazici AC, Baz K, Ikizoglu G. Recurrent herpes labialis during isotretinoin therapy: is there a role for photosensitivity? *JEADV.* 2006;20:93-5.
16. Saray Y, Seçkin D. Angioedema and urticaria due to isotretinoin therapy. *JEADV.* 2006;20:118-20.
17. Turel A, Ozturkcan S, Sahin MT, Turkdogan P. A rare side-effect of systemic isotretinoin treatment: pyogenic granuloma. *JEADV.* 2003;17:609-10.
18. Tinoco MP, Tamler C, Maciel G, Soares D, Avelleira JC, Azulay D. Pyoderma gangrenosum following isotretinoin therapy for acne nodulocystic. *Int J Dermatol.* 2008;47:953-6.
19. Elpern DJ, Burns JA. Atypical Pyoderma as a Side Effect of Isotretinoin. *J Am Acad. Dermatol.* 1985;6:1045-6.
20. Filho RR, Almeida HL, Lorencette NA, Netto JF. Acute generalized exanthematous pustulosis induced by isotretinoin. *Int J Dermatol.* 2010;49:1077-8.
21. Bigby M, Stern RS. Adverse reactions to isotretinoin. a report from the adverse drug reaction reporting system. *J Am Acad Dermatol.* 1988;18:543-52.
22. Caballero RC, Nagore E, Sanmartín O, Botella-Estrada R, Serra C, Guillen C. Vesicular prurigo pigmentosa in a 13-year-old girl: good response to isotretinoin. *JEADV.* 2005;19:474-6.

Cite this article as: Anaba EL, Oaku RI. Blistering eruptions following isotretinoin therapy for hidradenitis suppurativa: a case report. *Int J Res Med Sci* 2019;7:616-8.