

Case Reports

Psoriasis Induced by Isotretinoin in Acne

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Abstract

We described a case of psoriasis possibly resulting from isotretinoin therapy in acne. A 17-year-old patient started treatment with oral isotretinoin (30mg of drug) due to acne vulgaris. After 4 weeks, of treatment, the patient complains for the presence of scattered erythematous plaques and papules. The clinical picture suggested psoriasis (this is also confirmed by histopathological study). The history revealed that the patient's mother suffered from psoriasis for 30 years.

Key words: Psoriasis; acne; isotretinoin; skin diseases

Introduction

Isotretinoin acid (13-cis retinoic acid) is a synthetic analogue of vitamin A (I retinoids generation) and is one of the effective drugs in acne vulgaris.¹ The efficacy of isotretinoin at a dose of 0.5 to 1.0 mg/kg/day in the treatment of acne is well established and considered safe, but sometimes not well tolerated because of its skin side effects. Isotretinoin is an extremely valuable drug that is occasionally associated with well-known side-effects, including cheilitis, retinoid dermatitis, palmoplantar desquamation, and photosensitivity.^{2,3} We described a case of psoriasis possibly resulting of acne, after 3 weeks of isotretinoin therapy.

Case Report

A 17-year-old patient started treatment with oral isotretinoin due to acne vulgaris. The patient was taking 30mg of drug (daily, single dose); weighed 56 kg. After 4 weeks, of treatment, the patient complains for the presence of scattered erythematous plaques and papules (Fig. 1). The clinical picture suggested psoriasis (confirmed by histopathological study). History revealed that the patient's mother suffer from

psoriasis for 30 years. The patient showed no changes of psoriasis before treatment of isotretinoin and she has no changes which suggested that psoriasis were still before the treatment of isotretinoin. The patients was withdrawn from the oral isotretinoin. After 2 months after discontinuation of the drug and the local treatment of psoriasis, the psoriatic lesions were decreased. And single lesions of psoriasis on the arms persisted for over a period of 6 months the following observations. Lesions of acne came back to the state before isotretinoin therapy.



Fig.-1. Psoriasis on the leg in 17-year-old patient

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Discussion

So far has this is the first case reported of psoriasis as a possibly complication after oral isotretinoin. Other rare complications associated with oral isotretinoin has been also described. Whitman et al described a 17-year-old with unilateral calf pain, which was created during isotretinoin therapy² diagnosed as deep vein thrombosis. Swiss authors present a 16-year-old boy, in whom there was a development of Henoch-Schönlein purpura probably the use of isotretinoin.³ Pehlivan Y. et al. described 4 cases of sacroilitis.⁴ There are reports on the fact that oral isotretinoin may increase the risk of bowel disease⁵ and Ratner and Sambandan draw attention to the possible number of vascular complications in elderly patients.⁶

Beer et al present a case of an unusual a significant perioral abscess,⁷ which could was interpreted associate with significant colonization by Staphylococcus bacteria in this patient.

Spanish authors draw attention to the possibility of changes in the eye. The deterioration of visual acuity was associated with Corneal steepening.⁸

In addition, Radmanesh described 2 cases anal fissures and rectal bleeding, and Stetson et al described one case of whitlow herpetiformis.⁵ Isotretinoin (13-cis-retinoic acid) is a retinoid that has been used to treat a wide variety of conditions, some with great success.^{5,9} Although it is beneficial in many skin conditions, the side effects and toxicities of oral retinoids require careful monitoring by experienced physicians. We have treated more than a 1200 cases using oral isotretinoin and this is the first case to be reported.

The need to explain: What is the possible pathogenic mechanism for this occurrence? Is it more related to skin barrier disruption or immunomodulatory changes induced by isotretinoin?

Currently, the patient has a single psoriasis lesions on the legs and arms.

Conclusion

Psoriasis is a disease with a complex pathogenesis, induced inter alia by certain medicaments. Whenever prescribing in a psoriatic patient a new formulation for the treatment of concomitant diseases, we must reckon with the possibility of tightening or induced psoriasis. Isotretinoin should be cautiously used in patients with history of psoriasis.

Conflict of interest: None

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