

Clinical Image

Open Access, Volume 4

A rare case of minocycline induced diffuse hyperpigmentation

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Received: Aug 03, 2023

Accepted: Aug 29, 2023

Published: Sep 05, 2023

Archived: www.jcimcr.org

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DOI: www.doi.org/10.52768/2766-7820/2577

Description

84-year-old Caucasian female with a history of hypertension, diabetes mellitus type 2, and Chronic kidney disease Stage III started taking minocycline for rheumatoid arthritis, significantly improving her arthritis symptoms. She has taken minocycline 100 mg twice daily for over four decades. She then developed gradual, nonpalpable bluish-black skin discoloration involving her face, bilateral upper extremities, right shin, fingernail beds, and bilateral sclera.

After ruling out common causes of hyperpigmentation, she was eventually diagnosed with minocycline-induced hyperpigmentation. Hyperpigmentation is a known side effect of the long-term use of tetracyclines. Minocycline can cause hyperpigmentation of the skin, teeth, bone, sclera, mucous membranes, thyroid, trachea, and nails [1]. Although it is a rare and well-documented side effect in the literature, the risk of hyperpigmentation increases with prolonged use [2]. Minocycline-induced nail pigmentation is far less common compared to skin hyperpigmentation. Ocular pigmentation involving the sclera, conjunctiva, and retina is rare and does not cause visual dysfunction [3].

The above patient had an unusual presentation with diffuse

Abstract

Minocycline, a tetracycline group of antibiotics, is commonly used to treat various infections, dermatological conditions and rarely used to treat rheumatoid arthritis. Prolonged use of minocycline in higher doses can rarely cause skin hyperpigmentation. Minocycline-induced hyperpigmentation can also involve the sclera and retina in the eyes. It can rarely involve nail beds as well.

We present a case of diffuse hyperpigmentation involving bilateral sclera, upper extremities, and all ten nail beds in a patient on chronic minocycline therapy for rheumatoid arthritis, which was never reported before in the literature.

and extensive hyperpigmentation involving the face, bilateral upper extremities, right lower extremity, diffuse bilateral upper extremity nail beds, and bilateral sclera, which is very uncommon.

Given the excellent benefit of her arthritis symptom control and non-bothersome hyperpigmentation side effect, the patient decided to continue her minocycline therapy. Clinicians should be aware of this rare side effect with commonly used tetracyclines and caution patients about it. A thorough history and physical examination can avoid unnecessary biopsies in these patients.

References

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Figure 1: Shows bilateral scleral and facial hyperpigmentation.

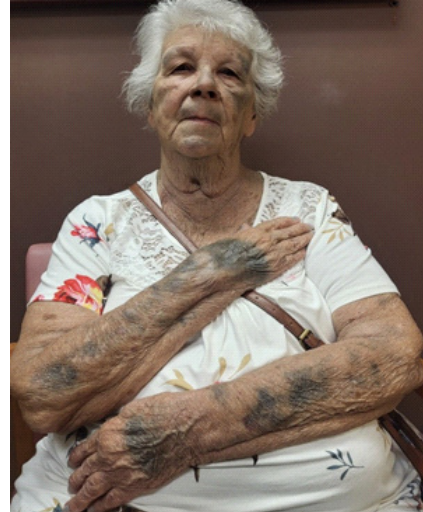


Figure 2: Shows diffuse hyperpigmentation involving the face and extensor aspect of hands and forearms.



Figure 3: Shows the hyperpigmentation of hands and all nail beds.