

## Multi-Drug Induced Palmar and Plantar Lichen Planus: First Description in the Medical Literature!

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### Introduction

We report a case of a 43-year-old male patient who developed palmoplantar violaceous papules, subsequently diagnosed as drug-induced lichen planus (LP) based on the histopathological findings and clinical correlation (figures. 1a, 1b).



#### Figs. Designations:

- 1a.** Lesions of the palmar aspect of the upper limbs characterized by shiny erythematous to purple-colored flat-topped papules.
- 1b.** Lesions of the dorsal aspect of the upper limbs characterized by shiny erythematous to purple-colored flat-topped papules.
- 1c.** Lesions of the plantar surface of the feet with diffuse violaceous erythema and erythematous to purple-colored flat-topped papules.
- 1d.** Lesions of the palmar part of the upper limbs characterized by shiny erythematous to purple-colored flat-topped papules.

The lesions had started three months earlier when the patient noticed a rash characterized by redness and swelling of the skin on the palms and soles (figures. 1c, 1d), accompanied by severe itching.

Previous medical history was relevant for myocardial infarction (2014). His current diseases were glaucoma, arterial hypertension and hypercholesterolemia. Systemic medication at the time of hospitalization included rosuvastatin 20 mg (0-0-1), metoprolol succinate 50 mg (1/2-0-0), ramipril 10 mg (1/2-0-1/2) and acetylsalicylic acid 75 mg (0-0-1). One year later he developed cutaneous skin lesions, identified later as palmo-plantar LP. At the time of hospitalization there were no evidence of bacterial or viral infections (Hepatitis B, Hepatitis C, HIV).

In consultation with a cardiologist it was decided to stop rosuvastatin, ramipril, metoprolol succinate and acetylsalicylic acid, and in replacement the patient started lercanidipine 10 mg bid, clopidogrel 75 mg id and ivabradine. After stopping the suspected drugs, treatment with acitretin 40 mg/daily was initiated. Additionally, the patient received desloratadine 5 mg id and topical therapy with methylprednisolone aceponate cream twice daily, with durable response after one month.

Recent literature suggests that drugs such as nebivolol and acetylsalicylic acid are associated with the induction of LP [1]. Current data also raise the possibility that drugs such as pembrolizumab, interferon- $\alpha$ , fenofibrate, telmisartan and brimonidine may also play a significant role in the induction of LP [2-6].

Lichen planus is a relatively common skin disorder of unknown etiology, but many studies in the literature suggest that one of the possible causes is systemic administration of different drugs. Sufficient evidence exists to support the thesis that beta-blockers, methyldopa, penicillamine, quinidine and quinine may play a pathogenic role and are potential triggers of the disease [7]. Given the available epidemiologic evidence, nonsteroidal antiinflammatory drugs could also be considered as a potential causative agents [1, 11].

The information we have gathered has lead us to the final conclusion that the medications that the patient was taking (rosuvastatin, metoprolol, ramipril and acetylsalicylic acid) may have triggered a multi- drug-induced palmo-plantar LP [8 -11].

All information about our patient and data from world literature suggest that this is the first case of a patient developing a multi drug-related palmo-plantar variant of LP.

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