

# A CASE OF CUTANEOUS EROSIVE LICHEN PLANUS WITH MUCOSAL INVOLVEMENT DURING NIVOLUMAB TREATMENT

Magliulo Manfredi<sup>1,2</sup> MD, Federica Scarfi<sup>1</sup> MD, Gimma Antonia<sup>1</sup> MD, Niccoli Chiara<sup>1</sup> MD, Carla Cardinali<sup>1</sup> MD, Gori Alessia<sup>1</sup> MD, Franca Taviti<sup>1</sup> MD

<sup>1</sup>UOSD Dermatology, USL Toscana Centro-Prato Hospital, Prato, Italy

<sup>2</sup>UOSD Dermatology, University of Florence, Italy

## background

Nivolumab, a programmed death-1 (PD-1) immune check-point inhibitor, is a humanized monoclonal antibody with demonstrated improving survival effects over unresectable or metastatic melanoma. It was approved by the US Food and Drug Administration (FDA) in December 2014 for this specific use, leading the way to other FDA approvals for diseases other than melanoma, including head and neck squamous cell cancer, nonsmall cell lung cancer, urothelial cancer and classic Hodgkin Lymphoma. Its action inhibits the interaction between programmed death (PD)-1 and PD ligand-1 on tumor cells, activating the T cells preventing their anergy.

## case report

We report a case of developed erosive Lichen Planus on a patient affected by metastatic melanoma treated with Nivolumab. Excluding the melanoma, the patient was not affected by other pathologies and had never had manifestations of Lichen Planus before Nivolumab. After three weeks of treatment, he presented symmetrical and confluent hypertrophic plaques with central ulceration on the legs and ankles and typical whitish papules involving all oral and genital mucosa, compatible with cutaneous and mucosal Lichen Planus. The diagnosis was histologically confirmed.

In order not to interrupt the immunotherapy, skin and mucosal lesions were treated with topical corticosteroids and clobetasol propionate cream, generating poor benefits. However, as shown in the photos, the cutaneous and mucous manifestations went into remission only after discontinuation of Nivolumab.

## conclusions

Lichenoid reactions induced by Nivolumab have been already reported in Literature (1-5). We present a rare case of Lichen Planus onset during treatment with Nivolumab, in its cutaneous erosive and variant and with extensive mucosal involvement.



A



B



C



D



E



F

- A. Whitish papules in oral mucosa during Nivolumab treatment
- B. Lichen Planus in genital mucosa during Nivolumab treatment
- C. Symmetrical and confluent hypertrophic plaques with central ulcerations on the ankle during Nivolumab treatment
- D. Oral mucosa after Nivolumab treatment
- E. Genital mucosa after Nivolumab treatment
- F. Ankle after Nivolumab treatment

## references

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