

Melanodermatitis Toxica Associated With the Use of Secukinumab for the Treatment of Plaque Psoriasis: A Case Report

Artur Antônio Duarte^{1*}, Dimitri Luz Felipe da Silva², Kaique Arriel³, Daniel Simão de Andrade³, Thais Kohatsu Yanase³, Ana Clara Maia Palhano³, Thaisa Bosquiroli Brandalize³ and Paola Assunção Mendes³

¹Clinic of Skin Diseases DW, São Paulo, São Paulo, Brazil

²Collaborating Physician at the Collagenosis, Brazil

³Resident Doctor at the Dermatology Service at Santo Amaro Medical School, Brazil

Citation: Artur Antônio Duarte. Melanodermatitis Toxica Associated With the Use of Secukinumab for the Treatment of Plaque Psoriasis: A Case Report. Int Case Rep Jour. 2022;2(5):1-3.

Received Date: 25 March, 2022; Accepted Date: 31 March, 2022; Published Date: 02 April, 2022

*Corresponding author: Artur Antônio Duarte, Clinic of Skin Diseases DW, São Paulo, São Paulo, Brazil, Email: <u>drartur@terra.com.br</u>

Copyright: © Artur Antônio Duarte, Open Access 2022. This article, published in Int Case Rep Jour (ICRJ) (Attribution 4.0 International), as described by http:// creativecommons.org/licenses/by/4.0/.

CASE SERIES

A 43-years-old woman, phototype II, with a previous diagnosis of plaque psoriasis, started follow-up at the Dermatology service of University Santo Amaro in February 2018. Dermatological examination showed scaly erythematous plaques infiltrated along areas of extension, back, abdomen and scalp. The patient denied any joint complaints. She also presented hidradenitis suppurativa (Hurley 1-2) and hypothyroidism as comorbidities. She reported previous treatments for more than 2 years with acitretin, suspended due to the onset of severe diffuse alopecia; infliximab, discontinued due to early treatment failure; and etanercept, suspended due to drug unavailability. During the follow-up at this service, she underwent treatment with UVB phototherapy and subcutaneous methotrexate 25 mg/week, which were maintained for 18 months, with the patient reaching PASI 90. However, she had a loss of response to this treatment and Secukinumab was then introduced. After application of the first induction dose, the patient already showed significant improvement of the lesions, reaching PASI 100 after the third dose, as well as remission of the hidradenitis suppurativa. In June 2020, 34 weeks after starting treatment with secukinumab, the patient started with disseminated pruritic erythematous papules and hyperpigmented macules in the cervical region and upper back. The diagnostic hypotheses of fungal folliculitis, scabies and drug eruption, related to secukinumab were raised. Therapeutic test with antifungal and ivermectin were performed, without success, and then the patient was instructed to discontinue secukinumab. After 30 days, the patient showed partial improvement of the skin lesions and pruritus and it was decided to keep secukinumab suspended. The patient maintained a progressive improvement in her skin condition, but after 60 days, secukinumab was reintroduced due to the appearance of psoriatic plaques on her elbows. In November



2020, the patient showed full remission of the psoriasis lesions, maintenance of some erythematous-pruritic papules on the upper limbs and cervical region and progressive worsening of gray-brown hyperpigmented macules, mainly on the cervical region, back, arms and legs. The hypothesis of melanodermatitis toxica secondary to secukinumab was raised and a skin punch biopsy was performed in two pigmented lesions, one in the hand and the other in the upper dorsal region. The histopathological analysis showed discrete vacuolar dermatitis associated with apoptotic keratinocytes in the epidermis and the presence of melanin in the dermis, which could correspond to our hypothesis of melanodermatitis toxica. Due to the COVID-19 pandemic, the patient lost follow-up for 8 months. In a new medical appointment held in July 2021, the patient maintained erythematous-pruritic papules on the upper limbs and cervical region and presented a significant worsening of the hyperpigmented macules. It was then decided to discontinue secukinumab again, due to the control of psoriasis and the suspicion of melanodermatitis toxica, secondary to secukinumab. [1-3] After 12 weeks of discontinuing the drug, the patient showed improvement of papular lesions and pruritus, a small lightening of the hyperpigmentation and few and small psoriatic plaques on the elbows and leg extensor face, and it was decided to keep topical treatment with clobetasol. Therefore, we report a possible adverse event to the use of secukinumab: the melanodermatitis toxica, as well as the use of secukinumab in the concomitant treatment of plaque psoriasis and hidradenitis suppurativa, with remission of both pathologies.



Figure 1: Clinical manifestation showing gray-brown hyperpigmented macules, on the cervical region, back and arms.





Figure 2: Histological examination showing discrete vacuolar dermatitis associated with apoptotic keratinocytes in the epidermis and the presence of melanin in the dermis.

REFERENCES

- 1. <u>Langley RG, Elewski BE, Lebwohl M, Reich K, Griffiths CE, Papp K, et al. Secukinumab in plaque</u> psoriasis - results of two phase 3 trials. N Engl J Med. 2014;371(4):326-38.
- 2. <u>Peigottu MF, Montesu MA. Adverse skin reaction to secukinumab. J Eur Acad Dermatol Venereol.</u> 2017;31(10):E432-433.
- 3. <u>Shibata M, Sawada Y, Yamaguchi T, Ohmori S, Omoto D, Haruyama S, et al. Drug eruption caused by</u> secukinumab. Eur J Dermatol. 2017;27(1):67-8.