

Vitiligo Repigmentation After SARS-CoV-2 Vaccine

Roberto Bustos-Macaya¹, Francisco González-Coloma², Juan Pablo Morales-Etcheberry², Laura Segovia³

1 Dermatology Unit, Barros Luco Hospital, Santiago de Chile, Chile

2 Department of Dermatology, Faculty of Medicine, University de Chile, Santiago de Chile, Chile

3 Pathology Anatomy Unit, Barros Luco Hospital, Santiago de Chile, Chile

Citation: Bustos-Macaya R, González-Coloma F, Morales-Etcheberry JP, Segovia L. Vitiligo Repigmentation After SARS-CoV-2 Vaccine. Dermatol Pract Concept. 2023;13(4):e2023236. DOI: https://doi.org/10.5826/dpc.1304a236

Accepted: April 24, 2023; Published: October 2023

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Funding: None.

Competing Interests: None.

Authorship: All authors have contributed significantly to this publication.

Corresponding Author: Juan Pablo Morales-Etcheberry, Address: Ricardo Lyon #3443, Apt 1103, Ñuñoa, Chile. E-mail: jpmoraleset@hotmail.com

Case Presentation

A 72-year-old male with a history of vitiligo that started during adolescence and hypertension—both conditions without any treatment—was sent by general practitioner because of the sudden appearance of asymptomatic, round pigmented macules on his vitiligo lesions, especially those on ears and hands, two days after receiving the first dose of SARS-CoV-2 vaccine BNT16b2. No new lesions appeared after the second dose. Clinically, the lesions looked like vitiligo re-pigmentation, but a skin biopsy was performed. In achromic areas, the biopsy showed a complete absence of melanocytes, while in the pigmented areas showed the presence of melanocytes without any other significant changes. Given that the patient had universal vitiligo before the vaccine, he asked for a depigmenting treatment and was then treated with 10% monobenzyl ether of hydroquinone.

Teaching Point

Since SARS-CoV-2 vaccines are relatively new, we still have a lot to learn about their potential adverse effect. There have been many reports of mucocutaneous symptoms after COVID-19 vaccines [1,2], including lupus, vasculitis and chilblains, their pathophysiology has not been completely understood yet, as mRNA vaccine are still new in our clinical



Figure 1. (A) Clinical picture of the hand of the patient, where the re-pigmented areas can be seen. (B,C) Histopathology of a re-pigmented area where melanocytes can be seen in the basal layer of the epidermis. (B) Corresponds to the H&E stain and (C) to Melan-A immunohistochemistry. (D,E) Absence of melanocyte in an achromic area of the hand. (D) Corresponds to the H&E stain and (E) to Melan-A immunohistochemistry.

practice. Even though new-onset vitiligo or worsening vitiligo has been described, we could not find any report about an improving vitiligo after any SARS-CoV-2 vaccine. This shows that we still have a lot to learn about this new disease and this new type of vaccine.

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