# Molluscum Contagiosum with Pseudo-Koebner Phenomenon

Beatriz Simões Vala<sup>1</sup>, Ana Catarina Fernandes<sup>2</sup>, Cristina Amaro<sup>3</sup>, Vasco Sousa Coutinho<sup>4</sup>

Port J Pediatr 2022;54(2):139-40
DOI: https://doi.org/10.25754/pjp.2023.26917

## **Keypoints**

#### What is known:

- Isomorphic lesions in patients with psoriasis, lichen planus, and vitiligo that appear in healthy skin after an insult constitute the Koebner phenomenon.
- When a viral agent is scattered through sane skin, it can lead to pseudo-koebnerization.

#### What is added:

- Koebner and pseudo-Koebner are important diagnostic clues in pediatrics.
- Molluscum contagiosum is one of the viral agents responsible for pseudo-koebnerization.

# Introduction

A 8-yar-old female child was evaluated in a pediatric dermatology consultation due to multiple papules on her upper body with several weeks of progressive onset. Relevant previous history included weekly attendance at a swimming pool. She presented with pearly-like papular lesions on her arms and dorsum, particularly numerous on the left side of the back, drawing attention to two linear bands of lesions with the pseudo-Koebner phenomenon, as shown in Fig. 1. Dermoscopy confirmed the clinical diagnosis of molluscum contagiosum (Fig. 2). The treatment option was the curettage of the lesions after local anesthesia.

Molluscum contagiosum is a common pediatric infection caused by poxvirus.¹ It affects the skin and it is a benign and self-limited condition.¹ There are various treatment options, such as curettage or topical therapy with potassium hydroxide, tretinoin, and salicylic acid, but therapy is not mandatory.¹.² However, treatment should be considered on distressed patients or if transmission to others is a concern.²

Koebner phenomenon is the name given to isomorphic lesions that appear after an insult in skin areas (trauma, scratches, tattoos, sun exposure, and pressure) that are not involved with the disease.<sup>3</sup> It occurs in diseases, such as psoriasis, lichen planus, and vitiligo and is reproducible by a variety of stimuli.<sup>3</sup> Pseudo-koebnerization results from the seeding of a viral agent by the surrounding tissue, as observed in our case.<sup>3,4</sup> Other pediatric infections where this can be seen are warts and varicella.<sup>3,4</sup>

The authors emphasize the importance of recognition of true and pseudo-Koebner phenomena. Koebnerization may constitute a valuable diagnostic hint in common pediatric conditions.



**Figure 1.** Macroscopic aspect of the lesions of the left side of the dorse, some forming linear bands of lesions (pseudo-Koebner phenomenon).

**Corresponding Author** 

Beatriz Simões Vala | E-mail: beatriz.vala@chleiria.min-saude.pt

Address: Hospital de Santo André, Centro Hospitalar de Leiria, Rua de Santo André, 2410-197 Leiria, Portugal Received: 04/04/2022 | Accepted: 28/02/2022 | Published online: 01/04/2023 | Published: 01/04/2023

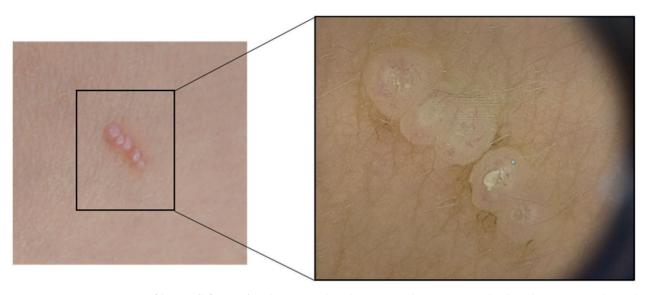
<sup>1.</sup> Pediatrics Service, Centro Hospitalar de Leiria, Leiria, Portugal

<sup>2.</sup> Pediatrics Service, Hospital Distrital de Santarém, Santarém, Portugal

<sup>3.</sup> Dermatology Service, Centro Hospitalar Lisboa Ocidental, Lisbon, Portugal

<sup>4.</sup> Dermatology Service, Hospital CUF Descobertas, Lisbon, Portugal

<sup>©</sup> Author(s) (or their employer(s)) and Portuguese Journal of Pediatrics 2023. Re-use permitted under CC BY-NC. No commercial re-use.



**Figure 2.** Macroscopic aspect of lesions (left image) and corresponding dermoscopy showing a central yellowish structure and vessels around, characteristic of molluscum contagiosum.

**Keywords:** Child; Molluscum Contagiosum/complications;

Molluscum Contagiosum/diagnosis; Skin/injuries

#### **Author Contribuitions**

BV and ACF participated in acquisition of data. BV and ACF participated in the drafting of the manuscript. CA and VSC participated in the critical revision of the manuscript. All authors approved the final manuscript and are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

#### **Conflicts of Interest**

The authors declare that there were no conflicts of interest in conducting this study.

#### **Funding Sources**

There were no external funding sources for the realization of this paper.

# **Provenance and peer review**

Not commissioned; externally peer reviewed

# **Confidentiality of data**

The authors declare that they have followed the protocols of their work centre on the publication of patient data

## **Consent for publication**

Consent for publication was obtained.

#### References

- 1. Gerlero P, Hernández-Martín Á. Update on the treatment of molluscum contagiosum in children. Actas Dermosifiliogr 2018;109:408-15. doi: 10.1016/j.ad.2018.01.007.
- 2. Centers for Disease Control and Prevention. Molluscum contagiosum: Treatment options [accessed 31 March 2022]. Available at: https://www.cdc.gov/poxvirus/molluscum-

contagiosum/treatment.html

- 3. Sagi L, Trau H. The Koebner phenomenon. Clin Dermatol 2011;29:231-6. doi: 10.1016/j.clindermatol.2010.09.014.
- 4. Bucak IH, Almis H, Turgut M. Varicella pseudo-Koebner phenomenon associated with vascular access opening. Clin Exp Dermatol 2018;43:203-205. doi: 10.1111/ced.13306.