Portuguese Journal of Dermatology and Venereology

PERMANYER

Check for updates

Port J Dermatol and Venereol.

LETTER TO THE EDITOR

Baricitinib as treatment for isolated severe nail lichen planus

Tratamento de líquen plano ungueal grave com baricitinib

Ana L. João[a], Margarida Caldeira, Joana Cabete, Nélia Cunha, and Bruno Duarte*

Department of Dermatology, Centro Hospitalar Universitário Lisboa Central, Lisbon, Portugal
[a]ORCID: 0000-0002-2489-0138

Dear editor,

Nail involvement occurs in approximately 10% of patients with lichen planus (LP)[1], and isolated nail affection is considered uncommon, although probably overlooked[2]. Nevertheless, nail LP (NLP) may be severe and can rapidly worsen, potentially resulting in irreversible scarring[3]. In addition, treatment is particularly challenging, with high rates of failures and relapses. As a result, NLP may have a significant functional and psychosocial impact[2-4].

We report the case of a 70-year-old female with severe refractory isolated NLP, which had started two decades earlier. All fingernails and toenails were affected (20-nail dystrophy), showing longitudinal ridging and splitting and trachyonychia (Fig. 1A). The diagnosis was confirmed by a nail matrix biopsy. The patient had been previously treated with potent topical, intralesional, and systemic corticosteroids without any significant improvement. She was later treated with methotrexate, with poor response. Baricitinib 2 mg/daily per os was thus initiated, and improvement was noted as early as the 1st month, with considerable recovery of nail changes after 3 months, showing almost complete resolution (Fig. 1B). In addition, the patient also reported significant improvement in finger motricity (due to the reduction of digital pulp pain while grabbing objects). The treatment was well tolerated, without side effects. Given the favorable response, the dosage was not increased, and the patient was kept under close clinical and laboratory follow-up.

Janus kinase (JAK) inhibitors have been revolutionizing the therapeutic armamentarium in dermatology, emerging as promising tools for inflammatory dermatoses[5,6]. In LP, the activation of the interferon-gamma pathway and cluster of differentiation 8 T-cell recruitment is mediated through JAK receptors, explaining the rationale for JAK inhibition in LP[7].

Tofacitinib has been studied in patients with scalp LP[8] and in a patient with NLP[9], with good outcomes. A recent expert consensus has indeed highlighted tofacitinib as a promising therapy for NLP[4]. Baricitinib also proved efficacious in a patient with NLP in a recent report[10].

In sum, NLP is a potentially severe and destructive disease with an unpredictable course and poor long-term prognosis. There is an unmet need for effective therapies for NLP, as no guidelines nor approved drugs are yet available. We present a severe, refractory NLP successfully treated with low-dose baricitinib without side effects in a 70-year-old female, highlighting the promising role of JAK inhibition in this scarring disorder. Additional studies and long-term follow-up are needed to strengthen its role in NLP management.

***Corresponding author:**
Ana L. João
E-mail: luisajoao92@gmail.com

Received: 18-12-2022
Accepted: 28-01-2023
DOI: 10.24875/PJDV.22000048

Available online: 02-03-2023
Port J Dermatol and Venereol. 2023;81(2):147-148
www.portuguesejournalofdermatology.com

2795-501X / © 2023 Portuguese Society of Dermatology and Venereology. Published by Permanyer. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

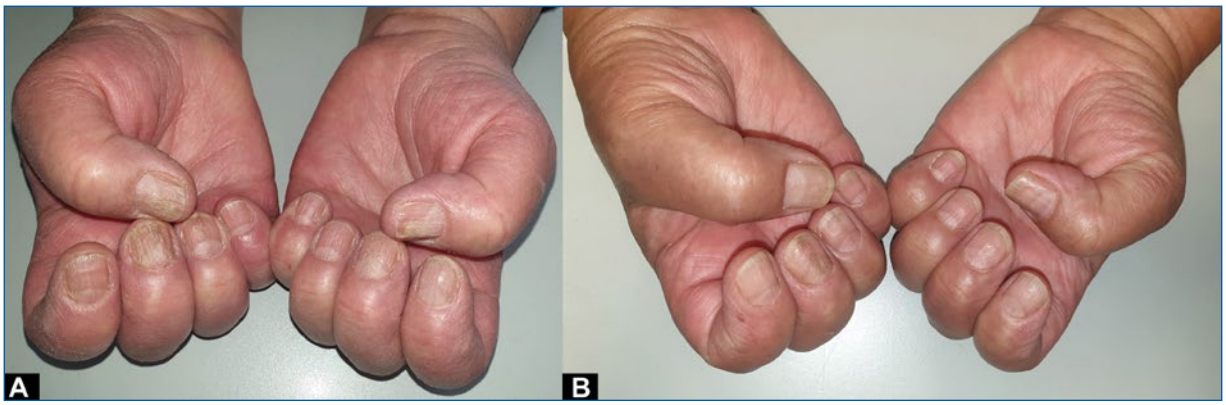

Figure 1. A: longitudinal ridging and splitting, and trachyonychia of all the digits. **B:** significant improvement of the nail changes after 3 months of 2 mg/daily baricitinib, with complete resolution in some digits.

Funding

None.

Conflicts of interest

None.

Ethical disclosures

Protection of people and animals. The authors declare that for this research, no experiments on humans and/or animals were performed.

Confidentiality of data. The authors declare that they have followed the protocols of their work center regarding the publication of patient data.

Right to privacy and written consent. The authors declare that they have received written consent from the patients and/or subjects mentioned in the article. The author of the correspondence is in possession of this document.

References

1. Samman P. The nails in lichen planus. Br J Dermatol. 1961;73:288-92.
2. Goettmann S, Zaraa I, Moulonguet I. Nail lichen planus: epidemiological, clinical, pathological, therapeutic and prognosis study of 67 cases. J Eur Acad Dermatol Venereol. 2012;26:1304-9.
3. Lipner S. Nail lichen planus: a true nail emergency. J Am Acad Dermatol. 2019;80:e177-8.
4. Iorizzo M, Tosti A, Starace M, Baran R, Daniel CR, Di Chiacchio N, et al. Isolated nail lichen planus: an expert consensus on treatment of the classical form. J Am Acad Dermatol. 2020;83:1717-23.
5. Chapman S, Kwa M, Gold LS, Lim HW. Janus kinase inhibitors in dermatology: part I. A comprehensive review. J Am Acad Dermatol. 2022;86:406-13.
6. Chapman S, Gold LS, Lim HW. Janus kinase inhibitors in dermatology: part II. A comprehensive review. J Am Acad Dermatol. 2022;86:414-22.
7. Pietschke K, Holstein J, Meier K, Schäfer I, Müller-Hermelink E, Gonzalez-Menendez I, et al. . The inflammation in cutaneous lichen planus is dominated by IFN-ɣ and IL-21-A basis for therapeutic JAK1 inhibition. Exp Dermatol. 2021;30:262-70.
8. Damsky W, Wang A, Olamiju B, Peterson D, Galan A, King B. Treatment of severe lichen planus with the JAK inhibitor tofacitinib. J Allergy Clin Immunol. 2020;145:1708-10.
9. Iorizzo M, Haneke E. Tofacitinib as treatment for nail lichen planus associated with Alopecia universalis. JAMA Dermatol. 2021;157:352-3.
10. Pünchera J, Laffitte E. Treatment of severe nail lichen planus with baricitinib. JAMA Dermatol. 2022;158:107-8.