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DERMATOLOGIC THERAPY WILEY

LETTER

Acrodermatitis continua of Hallopeau: Is apremilast an efficacious treatment option?

Dear Editor,

Acrodermatitis continua of Hallopeau (ACH) is considered a form of chronic and relapsing localized pustular psoriasis, initially affecting the tips of fingers and/or toes with an unknown pathogenesis.[1] ACH strongly affects the quality of life of patients and it is characterized by a sterile pustular eruption with a slow growth, which can lead to atrophy, onychodystrophy and osteolysis, hence requiring prompt diagnosis and treatment.[2,3]

Herein we describe a case of a 72-year-old man referring to our department for nail dystrophy, painful pustules and periungual erythema of the right third fingernail, refractory to topical corticosteroids. Patient's medical history was positive for hepatitis C, hypertension, dyslipidemia, diabetes, latent tuberculosis and psoriasis. Clinical examination showed the presence of erythemato-desquamative plaques and pustules at the right third finger with associated onycholysis (Figure 1A). Nail mycological culture was negative and X-ray examination did not show the presence of osteolysis of the distal phalanx of the right third finger. Histological examination confirmed the clinical suspect of ACH showing sub corneal neutrophilic and spongiform pustules with moderate lymphocytic infiltrate and thinning of the epidermis with atrophy of the papillary dermis.

Due to patient's comorbidities, severity of the disease and the presence of latent tuberculosis, apremilast, which do not need TB screening or prophylaxis, was started. At Week 4 follow-up, a slight improvement was observed showing a reduction of pustules and erythemato-desquamative plaques as well as an improvement of onychodystrophy (Figure 1B). At week 16, an almost complete resolution and associated symptoms was achieved; mild onychodystrophy still remained (Figure 1C). No side effects were reported.

Shared international guidelines regarding ACH treatment are lacking. Due to the rarity of this condition, recommendations are limited to case reports and few real-life experiences.[3] First line treatment of ACH is characterized by conventional topical and systemic therapies for psoriasis such as topical and systemic corticosteroids, calcipotriol, topical calcineurin inhibitors, methotrexate and cyclosporine.[3] However, ACH is usually refractory to these therapies. Thus, new drugs have been investigated. Biologics used for psoriasis such as anti-tumor necrosis factor (TNF) α, anti-interleukins (IL) 17, anti-IL12/23 and anti IL23 as well as small molecules have showed promising results in case reports or small case series.[3] Apremilast is an oral phosphodiesterase 4 inhibitor approved for the treatment of psoriasis and psoriatic arthritis.[4] Its efficacy has been shown also in several in real-life experiences.[5,6] In particular, apremilast is a valuable option of therapy for psoriatic patients with comorbidities for biologics (e.g., tuberculosis, cancer).[7]

In literature there are only three cases[8–10] reporting ACH successfully treated with apremilast in monotherapy. In particular, Kurihara et al.[8] reported the complete resolution of onychodystrophy after 3 months of treatment, while Lanna et al.[9] and Calleja Algarra et al.[10] showed the same results after 1 and 6 months, respectively,

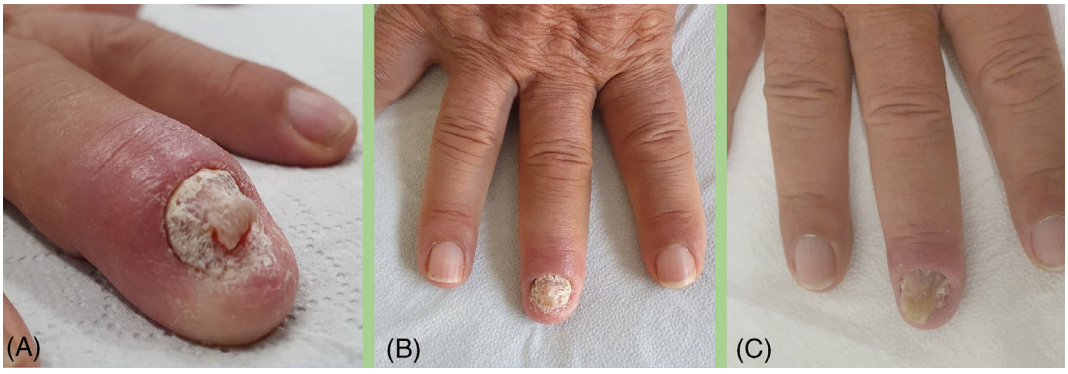

FIGURE 1 Patient at baseline (A), 4-week (B) and 16-week (C) follow-ups

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However Baron et al.[11] reported a case of an ACH unresponsive to apremilast successfully treated with secukinumab.

Here we report the first case of ACH localized in only one finger without osteolysis successfully treated with apremilast. In our case, patient did not experience adverse events and the treatment rapidly improved disease, associated symptoms as well as quality of life.

In conclusion, our case further confirms the efficacy and the safety of apremilast in the treatment of ACH. However, deepening the knowledge of the pathogenetic mechanism underlying ACH will allow to efficiently guide treatment selection. Certainly, further studies are needed in order to determine the best therapeutic algorithm.

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CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest.

AUTHOR CONTRIBUTIONS

Matteo Megna: conceptualization, validation, visualization, writing-original draft preparation, writing - review & editing. **Luca Potestio**: conceptualization, validation, visualization, writing-original draft preparation, writing - review & editing. **Nicola Di Caprio**: data curation, formal analysis, investigation, visualization. **Andrea Tajani**: data curation, investigation, methodology, visualization. **Gabriella Fabbrocini**: conceptualization, validation, visualization, writing-review & editing, supervision. **Alberto Annunziata**: conceptualization, validation, visualization, writing-original draft preparation. All authors read and approved the final version of the manuscript.

ETHICS STATEMENT

The authors have obtained the consent of the patient for clinical images.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analyzed during the current study.

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