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Case Report

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Nail lichen planus of a single fingernail successfully treated with intralesional triamcinolone acetonide

Abstract

Several cutaneous inflammatory diseases can affect the nails, leading to alterations that can be severe and can determine functional and psychosocial consequences. Lichen planus, a benign inflammatory disorder of not well understood etiology, is one of them. Nail manifestations in lichen planus may be isolated or appear in a more generalized involvement of the skin. Currently nail lichen planus is very difficult to treat, and there aren't therapies fully accepted by the scientific community. Topical therapy does not lead to significant improvements and intralesional steroids are considered as a first line therapy. I present a case of nail lichen planus involving just one nail of a hand, successfully treated with intralesional triamcinolone acetonide.

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Text

A 20 year-old man presented with a 1-year-old history of onychodystrophy involving the third fingernail, causing significant cosmetic disfigurement and a high psychosocial impact. The patient was treated initially with topical antifungal for 3 months and afterwards with topical steroid without substantial improvements. At the first evaluation (Figure 1) the involved fingernail was characterized by onycholysis, distal nail plate splitting, longitudinal ridging, and subungual hyperkeratosis. No other cutaneous or mucosal lesions were detected. The PAS (periodic acid–Schiff) stain reaction of nail clippings was negative for fungus.

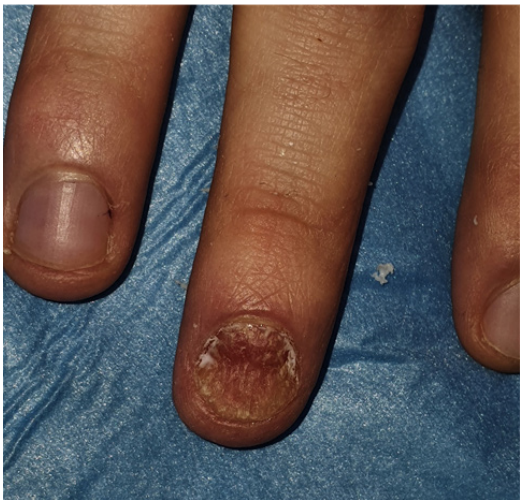

Figure 1 Fingernail at first evaluation.

No signs of irreversible complications, such as pterygium, were found, so there were no needs to start aggressively with systemic treatments. Intralesional triamcinolone acetonide every 4 weeks, for a total of 3 intralesional injections have been practiced. Steroid injections were performed in the nail matrix. 30 minutes before injection, the patient was advised to apply an anaesthetic cream (lidocaine/tetracaine) in order to reduce pain and discomfort.

After the first injection, the procedure determined a subungual haemorrhage (Figure 2), that completely disappeared in the following weeks. After 4 months the fingernail was greatly improved (Figure 3), even if not completely normalized, with a good satisfaction of the patient.

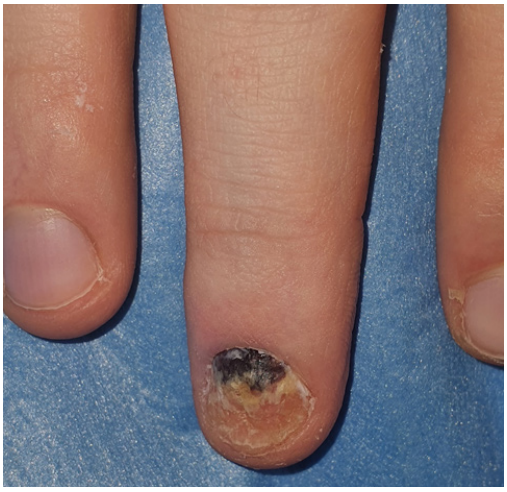

Figure 2 Subungual haemorrhage after the first steroid injection.

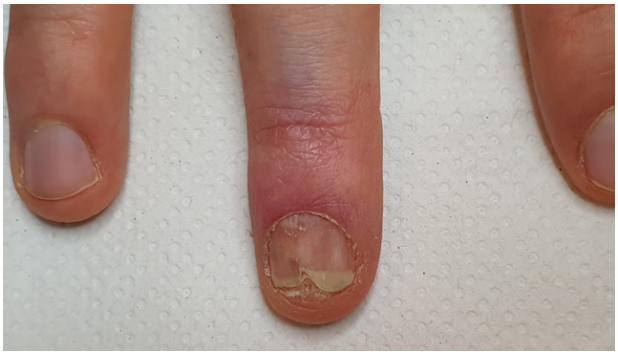

Figure 3 Fingernail improvements after 4 months.

Discussion

Lichen planus is believed to be an autoimmune disease, mediated by cytotoxic T CXCR3+ cells and plasmacytoid dendritic cells.[1] Nail lichen planus, even if it is not observed frequently (about 10% of cutaneous Lichen planus patients can develop nail involvement),[2] is a differential diagnosis that must be kept in mind in case of onychodystrophy, and it represents a difficult challenge in everyday clinical practice. Clinical findings are usually sufficient for diagnosis

and the use of dermoscopy can improve the diagnostic accuracy; in some cases, a biopsy of nail matrix can be confirmatory. Treatment should be started as soon as possible to avoid permanent damage to the nail plate, but require forbearance from both the patient and the dermatologist due to the slow growth of the nail.

Conclusions

There are currently no guidelines for the management of nail lichen planus and the published literature on treatment is limited.[3] Intralesional triamcinolone acetonide is considered first-line therapies. There is also a high rate of relapse, even in patients with complete full response to therapy.

Intralesional injection of triamcinolone acetonide has to be performed on the nail matrix; as the procedure can be extremely painful, the use of an anaesthetic cream is recommended to reduce pain. Subungual haemorrhage can be a local adverse effect.

Clinical results, as in my case, can be very excellent but they need time (Figure 4) and there is a high operator dependent variability.

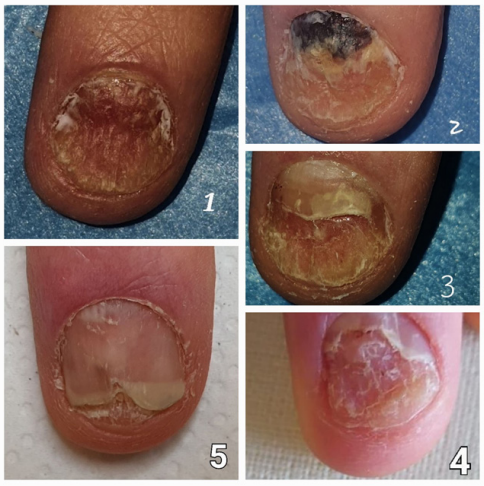

Figure 4 Clinical improvements after steroid injections: d1 baseline, d2 week 4, d3 week 8, d4 week 12, d5 week 16.

Acknowledgements

None.

Conflicts of interest

The author declares there is no conflict of interest.

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