Retronychia: clinical diagnosis and surgical treatment

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DESCRIPTION

Retronychia is the term used for proximal ingrowth of the nail and was first described by De Berker and Rendall[1] in 1999. It frequently affects women (~82%), and the great toes are the most common location.[2] The most frequent trigger is (micro) trauma.[3] With trauma the nail plate separates completely from the matrix, a new plate grows under the old plate, pushes it upwards and is buried into the ventral aspect of the proximal nail fold (PNF), causing inflammation. This condition is rarely diagnosed and in 70% of the cases patients have been inadequately treated with oral antibiotics and antifungals.[4]

We report the case of a 14-year-old girl who was referred to our outpatient clinic with oedema, erythema and pain of the proximal nail fold of the right hallux (figure 1A). This condition had been present for 3 months and was resistant to topical and oral antibiotics. There was no family history of melanoma. The patient ran twice a week. Given this clinical presentation, we considered retronychia as the most probable diagnosis.

We performed surgical avulsion of the nail plate that demonstrated thickening of the proximal plate and the presence of two layers of nails (figure 1B, C). Histological examination of the nail excluded the presence of malignancy. After 4 months of follow-up, 40% of the nail had regrown with slight thickening and yellowing but with no sign of recurrence (figure 1D). We explained the possibility of permanent dystrophy and yellowing of the nail to the parents.[5]

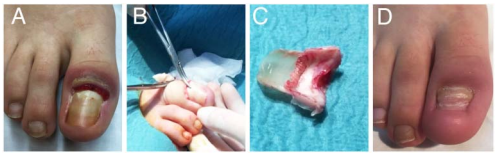

Figure 1 (A) Swollen and erythematous proximal nail fold. Granulation tissue is seen protruding from under the nail fold. Note the yellowish onycholytic discolouration of the nail. (B) Nail avulsion using the proximal approach, under digital block anaesthesia and tourniquet application. (C) Proximally thickened nail plate with a Y-shaped margin. Note the presence of two layers of nails. (D) Slight thickening and yellowing of the nail plate after 4 months of follow-up.

Learning points

- Retronychia is the term used for proximal ingrowth of the nail and must be differentiated from the most commonly seen onychocryptosis (embedding of the nail into the periungual lateral skin folds).
- Retronychia must be diagnosed on: painful inflammation of the proximal nail fold (PNF), thickening of the PNF and granulation tissue emerging from under the nail fold.
- Avulsion of the nail confirms the diagnosis and is therapeutic.

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REFERENCES

1 De Berker DA, Rendall JR. Retronychia-proximal in growing nail. *J Eur Acad Dermatol Venereol* 1999;12(2 Suppl):126S.
2 Ventura F, Correia O, Duarte AF, *et al*. Retronychia—clinical and pathophysiological aspects. *J Eur Acad Dermatol Venereol* 2016;30:16–19.
3 Cabete J, Lencastre A. Recognizing and treating retronychia. *Int J Dermatol* 2015;54:e51–2.
4 Baumgartner M, Haneke E. Retronychia: diagnosis and treatment. *Dermatol Surg* 2010;36:1610–14.
5 Piraccini BM, Richert B, de Berker DA, *et al*. Retronychia in children, adolescents, and young adults: a case series. *J Am Acad Dermatol* 2014;70:388–90.

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