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# Commentary on "Nail surgery: General principles, fundamental techniques, and practical applications"

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#### Dear Editor,

We read with interest, the comprehensive continuing medical education article on nail surgery by Queirós *et al.*<sup>1</sup> published recently in your esteemed journal. We congratulate the authors and the journal for covering various aspects of nail surgery in an astute and informative manner. However, we wish to comment on the specific aspect of nail plate avulsion, for the benefit of readers.

- 1. The authors' statement "Nail plate avulsion may be used as a therapeutic procedure in cases with ingrown nails, onychogryphosis, chronic onychomycosis, traumatic nail injuries, chronic paronychia, retronychia, pincer nail, or tumors of the nail apparatus," in our opinion, needs more discussion for the benefit of practicing readers. Nail avulsion is not "therapeutic" in any of the above conditions, except for possibly retronychia. Herein also, there is a strong case being made to avoid nail avulsion and treat with topical or intramatricial steroids. The need and extent of nail avulsion should be tailored as per the patient's clinical presentation.<sup>2</sup> The authors further state that nail avulsion is the first approach in cases with onychogryphosis. It appears recommendatory; however, opinions in general may differ. In fact, it should not be encouraged and rather be avoided in this condition which can be conservatively managed with mechanical debridement and limiting pressure on the nail bed.<sup>3</sup> Nail avulsion offers definitive treatment only if combined with permanent matricectomy or surgical resection of the matrix.<sup>3</sup> Following nail avulsion alone, the regrowing nail plate is unlikely to attach to the nail bed and cause further complications as detailed below.
- 2. Authors suggest "partial nail plate avulsion before nail bed biopsy for inflammatory, infectious, or neoplastic disorders." While this may work for the third category (neoplasia), it should be avoided for the first two categories stated, as the majority of the pathological information sought lies at the nail plate-nail bed junction, and is lost if the nail plate is avulsed before biopsy.
- 3. The authors mention the use of "nail-extraction forceps" for the removal of nail plates. This is generally neither required nor encouraged while removing the nail plate, to avoid any damage to the underlying fragile longitudinal ridges of the nail bed, with subsequent possibility of permanent onycholysis. The nail plate is easy to remove, provided that it has been freed from its attachments.

The nail plate is an important structure that provides a protective layer over the matrix, and if damaged, can lead to irreversible scarring. The process of nail avulsion is not a benign one,

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**Figure 1:** Distal embedding of the nail plate of the great toe following complete nail avulsion.

and complete nail avulsion is indicated in very few cases.<sup>4</sup> Avulsion of the plate is associated with a loss of its counter pressure over the nail bed, which leads to dorsal dislocation of the distal pulp and distal embedding, distal ingrown, or impacted nail [Figure 1]. Total nail avulsion is also associated with significant post-operative pain unless repositioned. Thus, it should not be taken lightly and avoided as far as possible. Various nail plate substitutes are described in the literature,<sup>5</sup> which can be used if the nail plate cannot be repositioned.

We emphasize that the policy of not avulsing a nail plate, if avoidable, should be uniformly followed. If avulsion is necessary, its extent should be kept to the minimum extent needed. Post-procedure replacement or repositioning of the nail plate, if possible and feasible, should always be encouraged.

## Authors' contributions

Chander Grover and Shikha Bansal had equal contribution in drafting the manuscript, revising it and preparing the final draft. Chander Grover shall act as guarantor for the same.

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