

Correction of Pincer Nail Deformity – Using a Vertical Z-Plasty

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Disclosure

The authors declare no competing
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Purpose

- Pincer nail deformity is an important health problem that causes discomfort in daily life.
- It is a deformity characterized by transverse overcurvature of the nail that increases distally.

- Recently several methods have been reported for the treatment of pincer nail deformity, such as dermis graft, or ADM (acellular dermal matrix) graft.
- But these procedures have some disadvantages, such as donor site morbidity, foreign body reaction or extra cost.

- In our procedure, using a vertical z-plasty without additional graft material, we experienced excellent prognosis.
- We report this simple procedure as a new treatment modification of pincer nail deformity.

Methods

- From march 2010 to march 2012, this technique has been performed on 6 toes in 5 patients.
- We designed vertically oriented Z-plasty in apex of toe.

- The triangular medial flap(M flap) is designed along to the over-curved nail bed.
- And lateral flap(L flap) is designed lateral portion of M flap.
- After dissection, the triangular flaps are transposed and redraped with deepithelization(Figure 1).
- The nail bed flap was sutured with 5/0 nylon and artificial nail is inserted

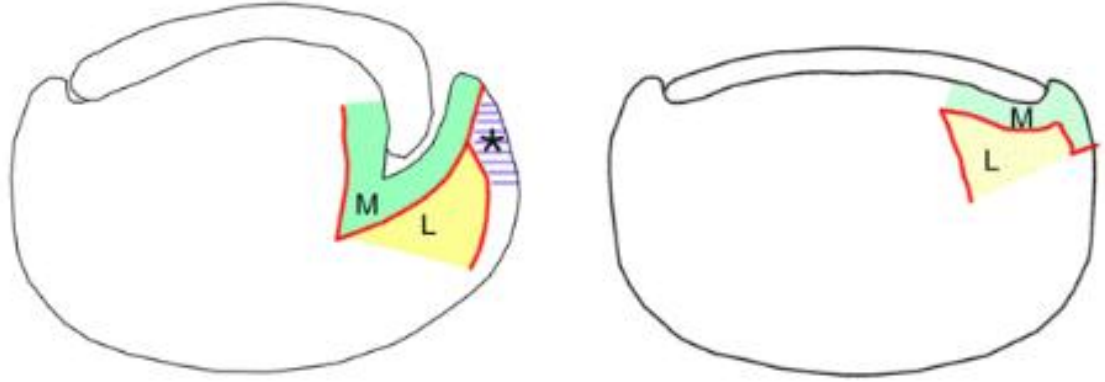


Figure 1

Results

- In our procedure, the distal part of the nail bed is elongated in a transverse direction by using a vertical z-plasty technique without additional matrix.
- In all unilateral and bilateral cases, the deformity was eliminated successfully with no recurrence in over 1 year of follow up.

- The growing nail turned back into its natural form and all symptoms were relieved.(Figure 2)



Figure 2

Conclusions

- Widening and flattening the nail bed provide a long-lasting effective treatment of the pincer nail deformity and pain relief.
- Our vertical Z-plasty method is found to be simple and effective treatment modality for pincer nail deformity.

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