

Ultrasonographic diagnosis of “Harpoon Nail”

Ultrassonografia no diagnóstico da “unha em arpão”

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ABSTRACT

The “harpoon nail” is a variant of the ingrown toenail. In this condition, the nail spicule pierces the distally growing periungual tissue and may emerge through the hyponychium. Its diagnosis can be confirmed by high-frequency ultrasound, facilitating the therapeutic programming.

Keywords: Dermoscopy; Nail diseases; Onychomycosis

RESUMO

A unha em arpão, variante de unha encravada, caracteriza-se por perfuração do tecido periungueal por espícula ungueal, que cresce distalmente, podendo emergir através do hiponíquio. Seu diagnóstico pode ser confirmado por ultrassonografia de alta frequência, facilitando a programação terapêutica.

Palavras-Chave: Dermoscopia; Doenças da unha; Onicomicose

“Harpoon nail” is a variant of ingrown toenail (Figure 1A). The etiology is similar to that of onychocryptosis and can be secondary to over-curvature of the nail plate or hypertrophy of nail folds, resulting in distal ingrowth.^{1,2} Inadequate trimming of the nails to relieve the pain results in the formation of a lateral spicule that grows distally, covered by the skin, perforating it at the tip of the toe and emerging through the hyponychium (Figure 1B).

The clinical picture is similar to that of onychocryptosis, associated with an erythematous-edematous papule and hematic crust in the hyponychium (Figure 1A). In the absence of treatment, the canal that contains the spicule may epithelize and the inflammation may disappear, leading to the chronic form.² High-frequency ultrasound is a noninvasive imaging method that is useful in the diagnosis of harpoon nail. The following ultrasound findings are possible in the diagnosis of harpoon nail:

Diagnostic Imaging

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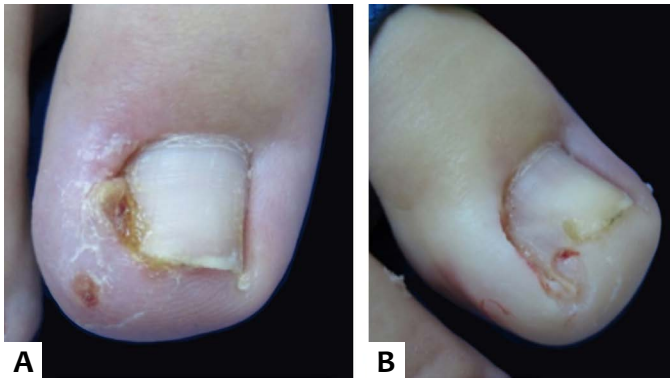


FIGURE 1: Clinical appearance of harpoon nail. A- Hypertrophy of nail fold and presence of granulation tissue associated with papular-erythematous lesion with crust in the hyponychium. B- View of the spicule and its tract during the surgical procedure (circle)

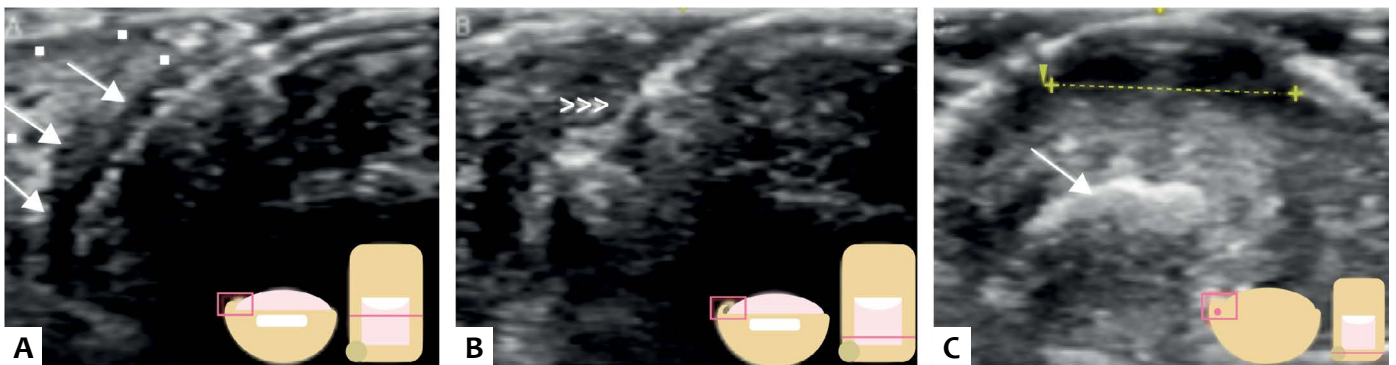


FIGURE 2: Gray scale ultrasound, transverse plane, right hallux. A – Ingrown nail plate (arrows) in the lateral nail fold (asterisks). B- Fragmentation of nail plate that originated the spicule. C- Spicule (arrow) in the subcutaneous tissue of the hyponychium, surround by hypoechoic inflammatory halo, accompanied by small hypoechoic intradermal collection (dotted line) with posterior acoustic enhancement.

High-frequency ultrasound in experienced professional hands proves to be a valuable tool for ruling out possible differential diagnoses of harpoon nail (e.g. onychoclavus, inclusion

cyst, etc.), confirming the diagnosis and facilitating surgical programming.●

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