Onychomatricoma: An Intraoperative Diagnosis

Couto PA*, Mota CM1, Rodrigues Chirano CA1, Grana AG1, dos Santos LM2 and do Valle FF2

1Medical Resident of Dermatology at Hospital Universitário Getúlio Vargas, Brazil
2Preceptor of Dermatology Service at Hospital Universitário Getúlio Vargas, Brazil

*Corresponding author: Patrícia Amaral Couto, MD. Serviço de Dermatologia, Hospital Universitário Getúlio Vargas, Avenida Apurinã, 4 - Praça 14 de Janeiro, Manaus - AM, 69020-210, Brasil, Tel: +55 92 981820744; Email: pac_86@live.com

Abstract
Onychomatricoma is a rare benign fibroepithelial tumor of the nail complex. The tumor is more frequent in middle-aged Caucasian women presenting chirodactyls. Trauma is the main etiological factor. Clinical presentation is characterized by a brownish hyperkeratotic longitudinal strip of variable thickness, splinter hemorrhages affecting the proximal portion of the nail plate preferentially, longitudinal and transverse hyper-curvature of the nail plate and digitiform projections that emerge from the nail matrix. In addition, it can be observed cavitations in the nail plate, structures that are best visualized after surgical exeresis of the lesion. It mimics many other conditions and tumors, and biopsy and histopathological analysis are essential for diagnostic confirmation.

Keywords: Onychomatricoma; Fibroepithelial tumor; Nail complex

Case Report
Male patient, 59 years old, with a 2-year course of hyperkeratosis, dystrophy and ungual hyperchromia of the left hallux (Figure 1).

Figure 1: Nail margin involvement with hyperchromic dystrophy and hyperkeratosis.

Figure 2: Surgical specimen with presence of digitiform projections.

The patient was referred to the dermatology service for diagnostic and treatment, and the tumor was excised (Figure 2). During the surgical procedure, it was possible
to visualize the classic structures for diagnosis and confirmed by histopathological examination, compatible with onychomatricoma (Figures 2 & 3).

**Figure 3:** Histopathology evidencing digitiform projections covered by stratified squamous epithelium with dense stroma.

**Discussion**

Onychomatricoma is a benign and rare fibroepithelial tumor of the nail matrix, first reported by Baran and Kint [1,2]. It has brownish hyperkeratotic bands and deformities of the nail plate. The macroscopic picture of onychomatricoma mimics other tumors and conditions, and biopsy and histopathological analysis are essential for diagnostic confirmation.

Nail surgery is a painful procedure and often leaves permanent dystrophies on the nail plate. After careful diagnostic analysis of the lesion, an experienced dermatologist must perform the surgical procedure, as it is necessary to distinguish the nail pathology from other diseases, and thus schedule an adequate surgical margin. Fibrokeratoma, periungual fibroma, osteochondroma, onicopapilloma, squamous carcinoma of subungual exostosis, amelanotic melanoma, keratoacanthoma, common wart, onychogryphosis, Darier’s disease, and nail lichen planus are differential diagnoses that should be questioned during the evaluation [3]. It is important to remember that despite the benign appearance, recurrence can occur and long-term follow-up is indicated because it is uncertain if the onychomatricoma will turn to malignant [4].

Following complete excision of the lesion, it is possible to visualize digitiform structures that are typical, and after that the diagnosis is confirmed with a histopathological examination. The characteristics are deep epithelial invaginations, fibrillar and fibrotic stroma in the proximal nail fold, and multiple projections in the distal zone.

**References**


