

## Nodular Lesion in the Nail Bed - Subungual Myxoma

Yusuf Can Edek<sup>1</sup>, Betül Ögüt<sup>2</sup>, Esra Adışen<sup>1</sup>

<sup>1</sup> Department of Dermatology, Gazi University Faculty of Medicine, Ankara, Turkey

<sup>2</sup> Department of Pathology, Gazi University Faculty of Medicine, Ankara, Turkey

**Key words:** Subungual, Myxoma

**Citation:** Edek YC, Ögüt B, Adışen E. Nodular Lesion in the Nail Bed - Subungual Myxoma. *Dermatol Pract Concept.* 2024;14(4):e2024246. DOI: <https://doi.org/10.5826/dpc.1404a246>

**Accepted:** May 15, 2024; **Published:** October 2024

**Copyright:** ©2024 Edek et al. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (BY-NC-4.0), <https://creativecommons.org/licenses/by-nc/4.0/>, which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original authors and source are credited.

**Funding:** None.

**Competing Interests:** None.

**Authorship:** All authors have contributed significantly to this publication.

**Corresponding Author:** Yusuf Can Edek. Address: Gazi Üniversitesi Tıp Fakültesi Hastanesi, Emniyet Mahallesi, Mevlana Bulvarı, No:29, 06560 Ankara/ Turkey. Telephone Number: +903122026129/+905062818274. E-mail: [yusuf-can-35@hotmail.com](mailto:yusuf-can-35@hotmail.com)

### Introduction

The subungual area is a small potential space between the nail plate and the distal phalanx. A lesion in this area can cause changes in both the nail structure and the distal phalanx. Many benign and malignant lesions located in the subungual area can be detected, although diagnosis may be delayed due to the nonspecific characteristics of these lesions [1,2]. Myxomas, which are soft mucoid lesions that grow by infiltration and expansion and do not metastasize, can be observed in the subungual region [3-5]. In this case report, a female patient who was evaluated for a nodular lesion on the first toenail and diagnosed with myxoma is presented.

### Case Presentation

A 31-year-old female patient was evaluated by us with a deformity in the toenail. The patient had a known history

of thyroid nodules. The patient described her complaints started as a small swelling under the nail four years earlier without any complaints. She used various topical-systemic antifungal treatments during this period and came to us when she did not benefit from the treatments. On dermatological examination, we observed a subungual pink nodule on the first toenail of her left foot (Figure 1). To rule out any accompanying bone pathology, a foot radiograph was requested, but no abnormality was detected. The lesion was excised for histopathological examination, and the evaluation of the biopsy material revealed spindle cell proliferation on a myxoid basis. Staining with alcian blue was observed in the myxoid material, while staining with CD34 and vimentin was observed in the spindle cells (Figure 2). The excision material was evaluated as compatible with myxoma. Considering the patient's family history of cardiac myxoma, an echocardiography was requested, and the imaging result was normal. The patient was informed about

the possibility of recurrence, and it was recommended she regularly follow up.

## Conclusion

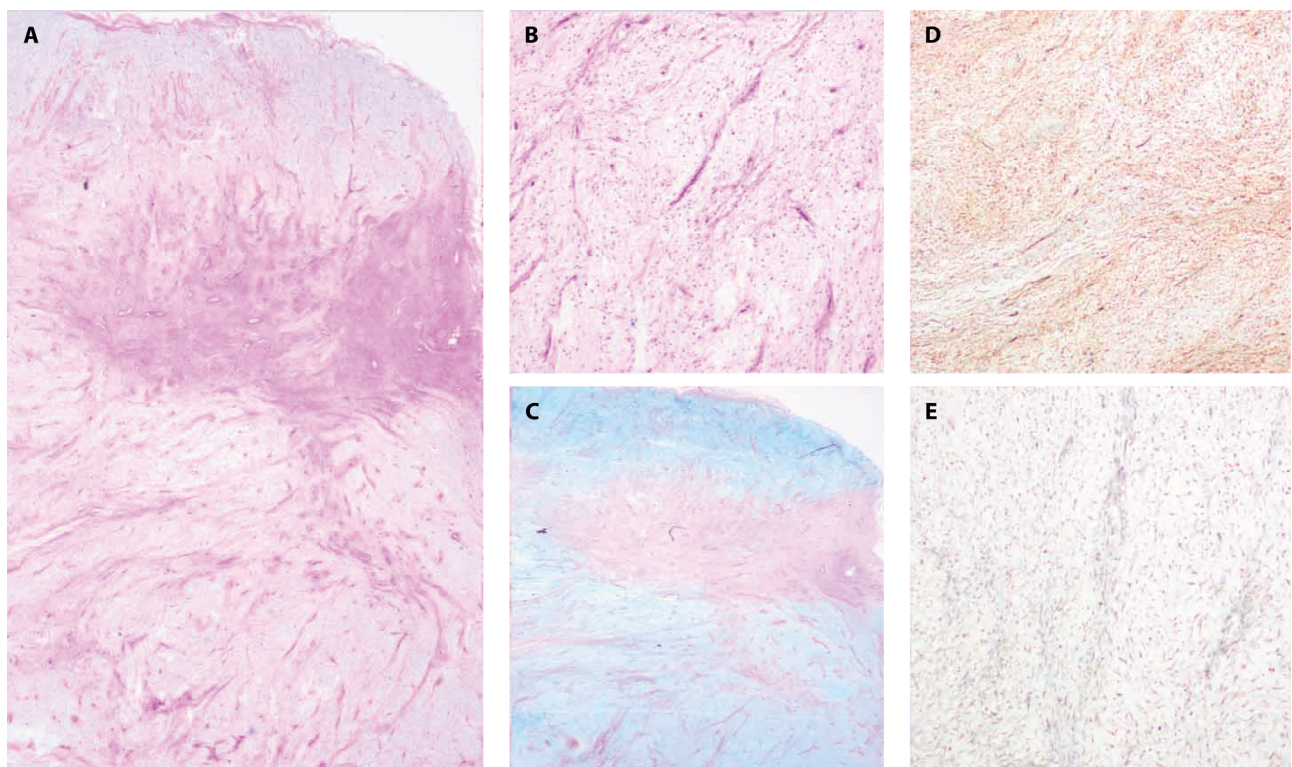
Myxoma is a neoplasia characterized by mucoid expanding infiltrative non-metastasizing masses. It is usually observed



**Figure 1.** A subungual pink nodule on the first toenail of left foot.

in older individuals and can be found in the heart, lower-extremity skeletal muscles, and jaw bones. Myxomas located in the upper extremity and subungual area are extremely rare [2]. The diagnosis of myxoma is based on the presence of spindle-shaped cells in the loose myxoid stroma, the absence of chondroblasts, lipoblasts, and rhabdomyoblasts, the soft translucent mucoid nature of the tumor, and the tumor being able to infiltrate but not metastasize. The differential diagnoses of myxoma include tumors with significant myxoid degeneration such as chondrosarcoma, fibrosarcoma, chondroma, and chondromyxoid fibroma, and histopathological examination is very important in clarifying the diagnosis of myxoma. Surgical excision can be performed in the treatment of subungual myxomas. Due to the infiltrative character of the lesions, it is very important to perform a complete excision and to follow the patient regularly [3-5].

In this case report, we aim to improve our understanding of the clinical and histopathological features of myxoma and treatment options. We would like to emphasize the importance of considering myxoma as a differential diagnosis in subungual lesions.



**Figure 2.** (A, B) Spindle cell proliferation observed on a myxoid background (H&E, x125, x100). (C) Diffuse positive staining in spindle cells with CD34 (x100). (D) Staining in myxoid material with alcian blue (x125). (E) Diffuse positive staining in spindle cells with vimentin (x100).

## References

1. Hinchcliff KM, Pereira C. Subungual Tumors: An Algorithmic Approach. *J Hand Surg Am.* 2019;44(7):588-598. DOI:10.1016/j.jhsa.2018.12.015
2. Willard KJ, Cappel MA, Kozin SH, Abzug JM. Benign subungual tumors. *J Hand Surg Am.* 2012;37(6):1276-1286. DOI:10.1016/j.jhsa.2012.04.001
3. Rozmaryn LM, Schwartz AM. Treatment of subungual myxoma preserving the nail matrix: a case report. *J Hand Surg Am.* 1998;23(1):178-180. DOI:10.1016/S0363-5023(98)80109-3
4. Kaehr D, Klug MS. Subungual myxoma. *J Hand Surg Am.* 1986;11(1):73-76. DOI:10.1016/s0363-5023(86)80107-1
5. Iida K, Egi T, Shigi M, Sogabe Y, Ohashi H. Cutaneous Myxoma of Multiple Lesions. *Plast Reconstr Surg Glob Open.* 2019;7(2):e2040. Published 2019 Feb 5. DOI:10.1097/GOX.0000000002040