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Case Report

A digital fibromyxoid tumor: a case report

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ABSTRACT

A digital fibromyxoma is a rare soft tissue tumor,which occurs in the finger and toes around subungual and periungual region. Histopathologically, it consists of a well-circumscribed unencapsulated dermal tumor composed of spindle and stellate cells in a loose fascicular pattern embedded in a myxo-collagenous stroma. We report this rare case of superficial acral fibromyxoma presenting as an asymptomatic subungual mass in the greater toe in a middle age female.

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INTRODUCTION

Superficial acral fibromyxoma is a fibromyxoid tumor first described by Fetsch et al. in 2001.[1] It is a rare slowly growing tumor that occurs in the subungual and periungual region of the toes and fingers.[2,3] It presents as a slow-growing nodule and commonly affects the greater toe.[3] On histopathology, it consists of a well-defined tumor composed of the spindle or stellate-shaped cells in a myxoid or collagenous stroma.[4]

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CASE REPORT

A 40 years female presented with a painless nodular growth beneath the nail plate in the left greater toe. On examination, there was a fleshy nodule of size 1.5 x 2 cm over the subungual region in the greater toe with a displacement of the nail plate. There was brownish discoloration with longitudinal striations in the overlying nail plate. There was no history of trauma, bleeding, erosion, and pain on exposure to cold (fig. 1).

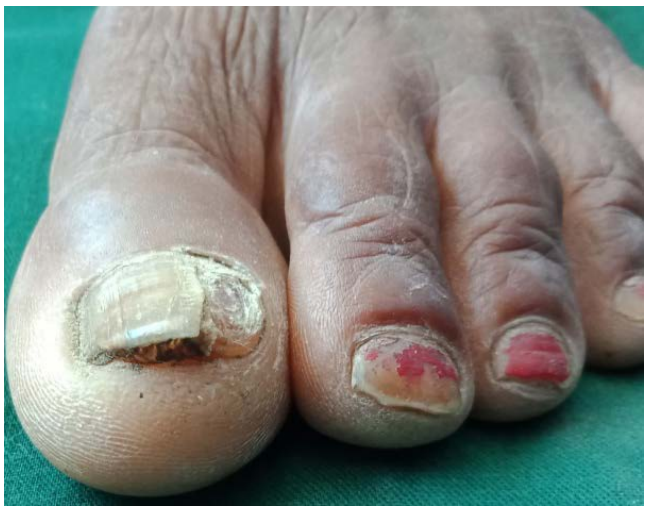
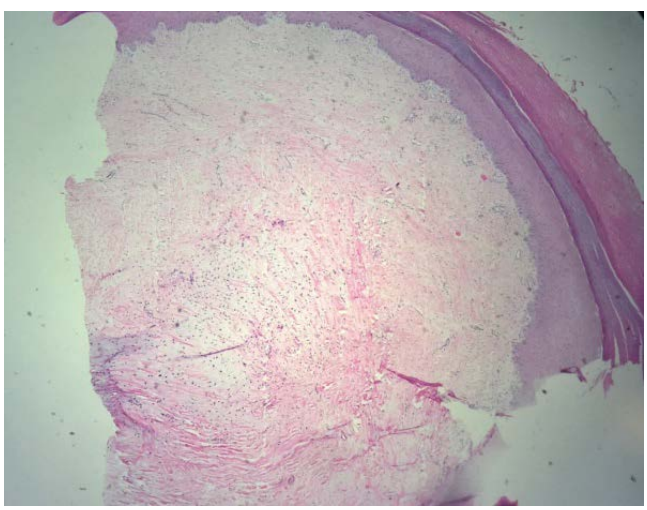


Figure 1: Clinical photography of a 40-year female with asymptomatic nodular growth in the left greater toe beneath the nail plate.

Based on history and examination differential diagnoses of subungual exostosis and nail tumors were considered. Under ring block anesthesia total nail avulsion was done followed by wide excision of the lesion which was subjected to histopathological examination. Skin biopsy revealed spindle and stellate shaped cells with a loose storiform pattern in a background of fibromyxoid stroma suggestive of superficial acral fibromyxoma (fig.2). Unfortunately, the immunohistochemical study could not be done in this case.



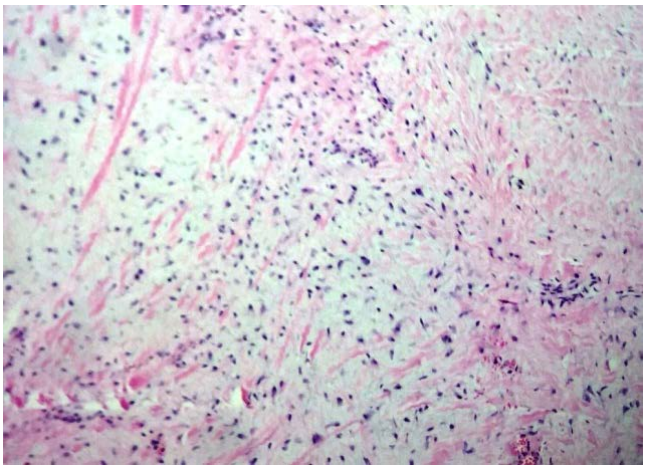


Figure 2: Histopathological view showing spindled and stellate-shaped cells with loose storiform pattern in the background of fibromyxoid stroma [HE Stain, X40(a) & X100 (b)]

DISCUSSION

Superficial acral fibromyxoma is a benign slow-growing tumor that affects the subungual and periungual region of hands and feet. It has male predominance with a ratio of 2:1 and usually occurs in the fifth decade of life.[1] Clinically these tumor presents as a solitary dome-shaped painless nodule, firm to rubbery inconsistency with a predilection to nail bed. On examination, it is a well-circumscribed non-capsulated dome-shaped, polypoid, or verrucous tumor located in the dermis but can extend into subcutaneous tissue.

The tumor is composed of spindle-shaped fibroblast-like cells or stellate cells arranged in a loose fascicular, random or storiform pattern embedded in myxoid, myxo-collagenous, or collagen only stroma along with prominent vessels and mast cells. Mild nuclear atypia may be seen.[5, 6] It is immunoreactive to CD34, CD99, and epithelia membrane antigen.[1]

Differential diagnosis includes myxoid fibrosarcoma, glomus tumor, acral fibrokeratoma, myxoid neurofibroma, fibroma of the tendon sheath, giant cell tumor of the tendon sheath, dermatofibrosarcoma protuberans.[7]

Hollman et al. observed bone involvement in 36% of cases of tumors presenting with the lytic lesion in the underlying bone. Radiography imaging can help to determine bone involvement.[5] Ultrasonography may be done to find the location, size, and vascularity of the lesion. [8] Treatment of the tumor is surgical excision.[9] The local recurrence rate is 22 % even after complete excision. There is a rare chance of any malignant transformation.[1]

CONCLUSIONS

Superficial acral fibromyxoma is a recently described soft tissue tumor seen in the subungual and periungual region

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of hands and feet. The definitive diagnosis can be done by histopathological evaluation, immunohistochemical studies, and radiography imaging. Treatment is surgical excision but there are chances of recurrence.

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