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Photo Vignette

Primary periungual leiyomyosarcoma

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Abstract

Primary superficial leiomyosarcoma is a very uncommon malignant tumor which occurs most commonly the lower limbs. We report one case of unusual topography of this tumor. An 81-year-old female patient presented with a 2 year history of a periungual tumor of the left index finger. The histopathological and immunohistochemical examination of a biopsy specimen was compatible with the diagnosis of leiomyosarcoma. There was no evidence of metastatic disease. An amputation of the index was performed.

Keywords: leiyomyosarcoma, nail, smooth muscle tumor

Introduction

Primary superficial leiomyosarcoma is a very uncommon tumor whose clinical presentation may appear non-specific, sometimes making its diagnosis difficult.

We report one case of unusual topography of this tumor.

Case synopsis

An 81-year-old woman, with a past history of local trauma presented with a 2 year history of a painless nodule of the left index finger that had been increasing progressively in size. Physical examination revealed an irregular, firm and vegetating perinugual tumor of the left index finger that measured 2.5 cm in diameter. (Figure 1).

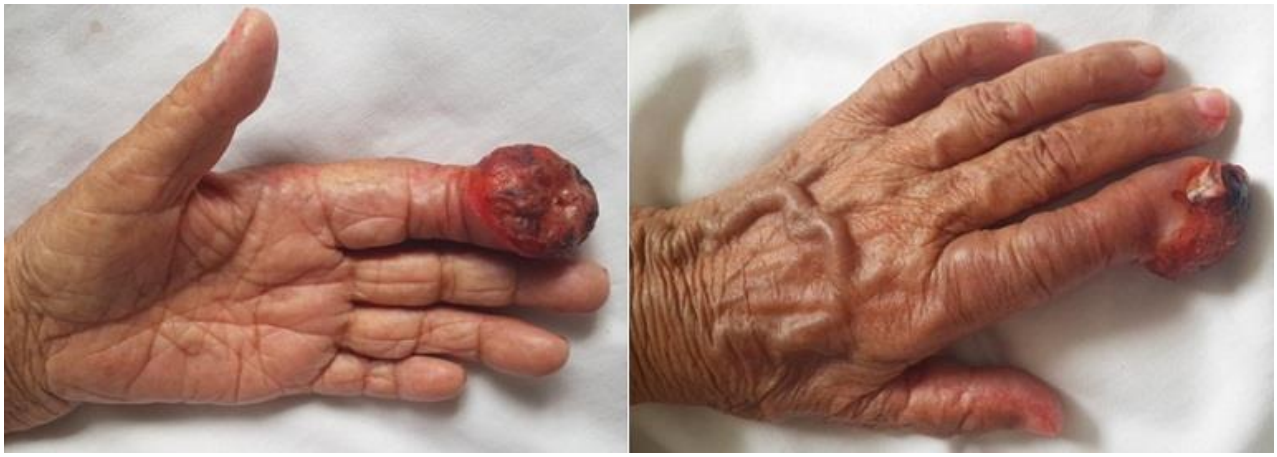

Figure 1. Periungual tumor of the left index finger

Lymph nodes were not palpable. The remaining clinical examination was normal. Histopathological examination of a biopsy specimen revealed a fusiform tumor with ulceration. The tumor mass consisted of intersecting spindle cells with smooth muscle differentiation in places. The cells had anisokaryotic nuclei, severe atypia, and numerous abnormal mitoses. Immunohistochemical examination showed tumor cells that intensely expressed smooth muscle actin and CD10 (Figure 2 A, B).

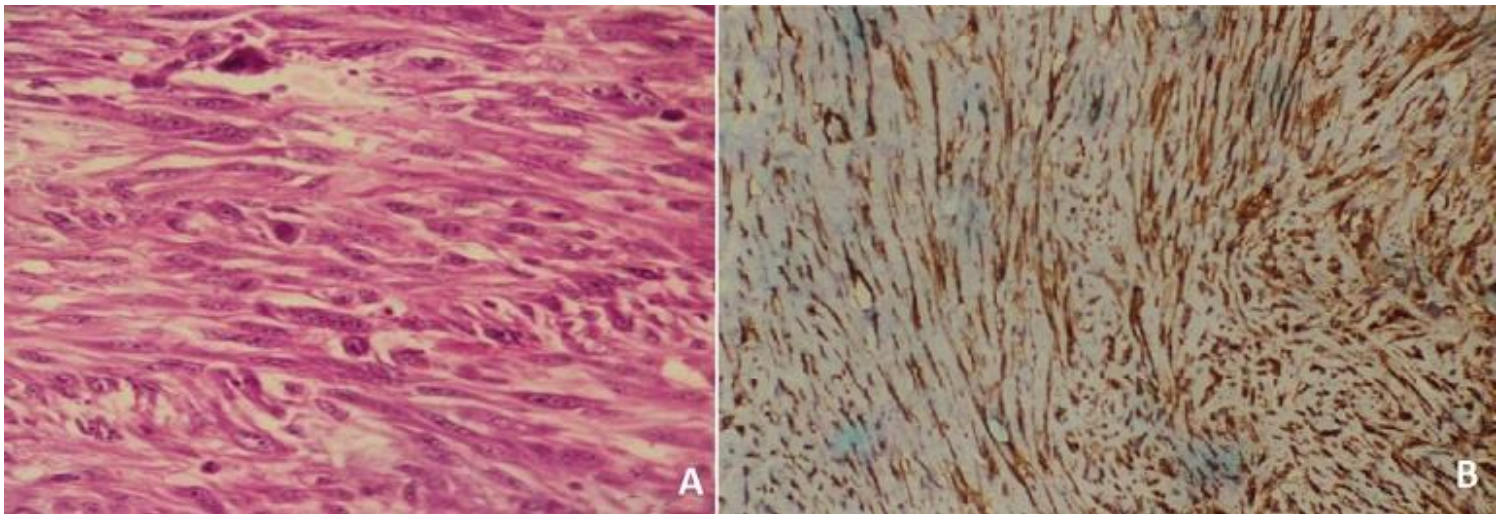

Figure 2. A) Histology showing fusiform tumor proliferation with cells exhibiting anisokaryotic nuclei, severe atypia, and numerous abnormal mitoses. B) Positive immunohistochemistry stain for smooth muscle actin

Desmin and h-caldesmon were negative. Melanocyte, nerve cell, and epithelial cell markers were negative. Thus, the diagnosis of leiomyosarcoma was established. Bone radiography revealed osteolysis in the distal phalanx of the left index finger, adjacent to the tumor. Further staging investigations by radiological examinations of the chest, abdomen, and ganglionic areas were all negative. Amputation of the index finger through the metacarpo-phalangeal joint was performed. The surgical resection margins were clear.

Discussion

Leiomyosarcoma is an uncommon malignant smooth muscle tumor, mainly derived from vessels or viscera. Very rarely, it may develop from the dermis or subcutaneous tissue. It is then called superficial leiomyosarcoma, which is subdivided according to its origin into two subtypes: cutaneous and subcutaneous leiomyosarcoma [1]. Generally, superficial leiomyosarcoma occurs as a solitary, slowly growing lesion. It usually develops in the lower limbs, but it may also occur anywhere on the body [2]. To our knowledge, only three cases of primary superficial leiomyosarcoma of the finger have been reported [3,4,5]; our case is the fourth. The etiology of these tumors is relatively unknown, although ionizing irradiation, sunlight, antecedent traumatic injury, chemical exposures, and lupus vulgaris have been associated [2]. In our case, repeated nail biting trauma could be a factor promoting the occurrence of this tumor.

Conclusion

We present a patient with primary superficial. Early diagnosis of this type of tumor is challenging owing to the scarcity of typical clinical diagnostic parameters.

References

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