Hard Digital Nodules

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Question

A 33-year-old female patient was referred to our Dermatology outpatient clinic because of tough nodules confined on the lateral aspects of the left hand (fig. 1a, b) that had been present for the past 9 years. The lesions were

painful on exposure to cold, flesh-colored, very firm in palpation, and measuring 0.4–1.0 cm in diameter. They significantly affected the cosmetic appearance of her digits, provoking severe distress to the patient.

What is your diagnosis?

Fig. 1. a, b Flesh-colored lesions firm in palpation affecting significantly the cosmetic appearance of the fingers.

Fig. 2. The lesions were surgically excised resulting in a satisfactory outcome.

Fig. 3. Histological findings (H&E, ×10). Interlacing bundles and irregular collections of elongated cells with brightly eosinophilic cytoplasm. Blue (right) arrow: entrapped atrophic hair follicle. Red (left) arrow: enclosed sweat glands and lipoid tissue.

Answer

Piloleiomyomas.

The lesions were surgically excised with a satisfactory aesthetic result (fig. 2). Histological examination revealed ill-defined intradermal lesions, which merged imperceptibly with the surrounding connective tissue. The tumor was composed of uniform interlacing bundles and irregu-

lar collections of elongated cells with brightly eosinophilic cytoplasm, which encompassed hair follicles and sweat glands (fig. 3). The epidermis was unaffected. Immunohistochemistry was performed and it was revealed that the tumor cells were positive for actin and desmin. These findings were compatible with piloleiomyoma.

Discussion

Leiomyomas are benign soft tissue tumors originating from the smooth muscle. They can occur most commonly in the uterus and small bowel and malignant transformation is rare. Piloleiomyoma is an uncommon, benign, smooth-muscle tumor arising from the arrectores pilorum muscles of the skin [1]. The etiology of piloleiomyoma remains obscure but genetic predisposition is probably involved [2, 3]. It presents as a single lesion or multiple lesions, usually developed in the 2nd–3rd decade of life. The lesions are tender or painful, sensitive to cold and palpation. Surgical excision is recommended; however, recurrences may occur. To our knowledge, this is probably the first case of piloleiomyomas with digital localization.

Statement of Ethics

The patient has given her informed consent.

Disclosure Statement

The authors have no conflicts of interest to declare. There were no funding sources for this work.

Key Words

Leiomyoma · Piloleiomyoma · Digit

References

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