



Acquired Digital Fibrokeratoma

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Definition

Acquired digital fibrokeratoma (ADFK) is a benign, fibrous tumor of the skin. ADFK is not included in the World Health Organization (WHO) classification of skin tumors. It is also known as acral fibrokeratoma and acquired periungual fibrokeratoma.

Epidemiology and Presentation

ADFK is a relatively rare lesion originally described in the fingers (hence the name); actually it can occasionally occur on the lower lip, nose, elbow, pre-patellar area, nail bed, and heel (therefore, the term “acral fibrokeratoma” would probably be more accurate). This neoplasm arises more frequently in middle-aged adults. Typically, it presents as a small solitary asymptomatic papule (generally less than 1 cm in size) surrounded by a characteristic hyperkeratotic collarette.

Pathology

The lesion presents with hyperkeratotic and acanthotic epidermis with thick collagen bundles oriented along the vertical axis in the dermis. The dermal component shows one of three histological variants: type 1 is the most common variant and presents as a dome-shaped lesion consisting of a dermal core of thick, densely packed collagen bundles with fine elastic fibers; type 2 is a mainly tall and hyperkeratotic lesion with more fibroblasts arranged in the cutis than type 1, along with reduced elastic fibers; and type 3 is the least common variant and presents as a flat to the dome-shaped lesion with poorly cellular dermal core, edematous structures, and no elastic fibers.

Differential diagnosis may be needed with the following: common wart (*verruca vulgaris*, the most frequent neoplasm of the hand and fingers, it is caused by human papillomavirus types 1, 2, 4, and 29); cutaneous horn (a clinical diagnosis referring to an exophytic and hyperkeratotic growth that contains a column of keratin; histological examination may show a premalignant or malignant underlying lesion); neurofibroma (→ see dedicated section); pyogenic granuloma (→ see dedicated section); and acrochordon (also known as skin tag, soft fibroma, cutaneous papilloma, cutaneous tag, fibroma pendulum, and fibroma molluscum; non-acral location, pedunculated, less hyperkeratotic, less dense connective tissue).

Biomarkers

Immunostaining is not contributory.

Prognosis

ADFK is a benign lesion without risk of malignant transformation.

Therapy

Surgical excision is the treatment of choice.

Suggested Readings

- Longhurst (2015) An unknown mass: the differential diagnosis of digit tumors. *Int J Dermatol* 54(11):1214–1225
- Shih (2019) Acquired digital fibrokeratoma: review of its clinical and dermoscopic features and differential diagnosis. *Int J Dermatol* 58(2):151–158