Giant acquired digital fibrokeratoma

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DESCRIPTION

A man in his 50s presented to the dermatology outpatient department with a painless skincoloured exophytic horn-like growth arising from the dorsal surface of the left index finger. It measured 3.5 cm in length with a broad base of 1.5 cm in diameter (figure 1). The growth had a characteristic hyperkeratotic collarette at its base. There was no history of any local factors like trauma or irritation. A clinical diagnosis of gaint acquired digital fibrokeratoma (GADFK) was made. Surgical excisional biopsy is performed as both a diagnostic and therapeutic procedure. Histopathology examination revealed a digitate lesion, composed of massive hyperkeratosis, acanthosis, a core of thick collagen bundles and vertically oriented small dermal blood vessels suggestive of ADFK (figure 2). Neural structures were absent and lacked adnexal structures, ruling out the possibility of the supernumerary digit. The final diagnosis of giant ADFK was confirmed because of the size of more than 1 cm and histology.

ADFKs are benign, solitary, hyperkeratotic well-defined papules in digitate form looking like horns with a collarette of skin at its base. The lesions are usually dome-shaped, although they may present as elongated finger-like projections, as in the index case. Common sites of occurrence are on fingers and toes but can also

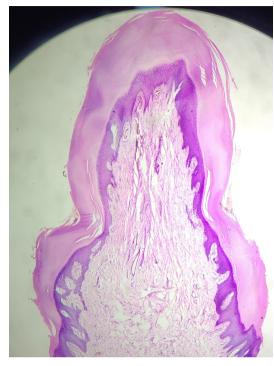


Figure 2 Hematoxylin and eosin stain reveals a digitate shaped, hyperkeratotic and acanthotic pedunculated lesion with peripheral collarette. The core is composed of dense collagen bundles, numerous capillaries and fibroblasts (original magnification, 5×).



Figure 1 Horn-like growth arising from the dorsal surface of the left index finger with hyperkeratotic collarette at its base.

be seen on the lower lip, nose, elbow, prepatellar area and periungual tissue. The size of the lesion is generally less than 1 cm, but there are reported cases of ADFK of more than 1 cm. These lesions are designated as GADFKs as in the index.²

The differential diagnosis of ADFK includes supernumerary digit, verrucae vulgaris, cutaneous horn, neurofibroma and pyogenic granuloma. Table 1 depicts the common conditions to be considered as differential diagnosis with their clinical characteristics and management. ³⁻⁵

ADFK are usually asymptomatic but may be painful when traumatised. They are benign tumours with no risk of malignant transformation. They may affect the function of the digit and require removal. Surgical excision, cryotherapy, shave excision, curettage and cautery are all reported as treatment options. Excellent functional recovery with a satisfying cosmetic result is the expectation after complete surgical treatment. Usually, there is no recurrence. 6

Classical collarette of skin at its base and specific histology helps in the diagnosis of ADFK.



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Condition	Differentiating points	Management
Supernumerary digit	Usually found at the base of the fifth finger. Histology shows— neural bundles and neuroid elements	Surgical excision
Verrucae vulgaris	Tiny black dots on the wart surface, especially after paring the surface.	Cauterization—chemical, electrical, radiofrequency cauterisation (RFC) Topical : Five flouro uracil(FFU), Retinoid Cryosurgery
Cutaneous horn	Conical projection above the surface of the skin. Typically occurs in sun exposed areas. Actinic keratoses are the most common premalignant primary cause of cutaneous horn.	Surgical excision, RFC, treating the underlying cause
Cutaneous neurofibroma	Skin coloured soft, polypoid or dome-shaped nodule	Counselling about the benign nature of the disease
Pyogenic granuloma	Solitary, rapidly growing, friable, dome-shaped or pedunculated, papule or polyp; easily bleed with minor trauma	Topical TCA, eCo3 laser, cryosurgery
Koenen's tumour (periungual fibroma)	Digitated or polypoid growths with glove-clove-like, globoid, fusiform, or vermiform shapes	Counselling about the benign nature of the disease
Non-pigmented eccrine poroma	Skin-coloured or pink papule, plaque or nodule; occurs in the palms or side of feet	Surgical excision
Aggressive papillary digital adenocarcinoma	Skin-coloured or tan-brown to grey papule or nodule	Surgery

Learning points

- Classical clinical finding of collarette of skin at its base and specific histology helps in the diagnosis of acquired digital fibrokeratoma (ADFK).
- ► ADFK is a benign tumour with no risk of malignant transformation.
- Excellent functional recovery with a satisfying cosmetic result is the expectation after complete surgical treatment.

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Case reports provide a valuable learning resource for the scientific community and can indicate areas of interest for future research. They should not be used in isolation to quide treatment choices or public health policy.

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REFERENCES

- 1 Al-Atif HM. Giant acquired acral fibrokeratoma: a case report. *Dermatol Reports* 2019:11:8215.
- 2 Choi JH, Jung SY, Chun JS, et al. Giant acquired digital fibrokeratoma occurring on the left great toe. Ann Dermatol 2011;23:64–6.
- 3 Longhurst WD, Khachemoune A. An unknown mass: the differential diagnosis of digit tumors. *Int J Dermatol* 2015;54:1214–25.
- 4 Shih S, Khachemoune A. Acquired digital fibrokeratoma: review of its clinical and dermoscopic features and differential diagnosis. *Int J Dermatol* 2019;58:151–8.
- 5 Berger RS, Spielvogel RL. Dermal papule on a distal digit. acquired digital fibrokeratoma. Arch Dermatol 1988;124:1559–60,
- 6 Shelley WB, Phillips E. Recurring accessory "fingernail": periungual fibrokeratoma. Cutis 1985;35:451–4.

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