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PhotoDermDiagnosis

Wart like growth on the little finger

Section Editor

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A 35-year-old woman presented to us, with a 4 to 5 month history of a skin-coloured growth on the right little finger. After an initial growth phase of several weeks, the lesion stabilized but did not regress. There was no history of pain, itching, bleeding after trauma. The patient was in good health and came to us for removal of the lesion as it was a cosmetic nuisance. Cutaneous examination revealed a 5-6 mm conical lesion with a hyperkeratotic surface on the dorsal aspect of the right little finger at the level of the proximal interphalyngeal joint (**Figure 1)**. There was an epidermal collarette of scale around the base of the lesion. Histopathological examination demonstrated dense interwoven bundles of collagen fibres in the centre of the lesion which were arranged haphazardly for the most part (**Figure 2**), but there were areas where the fibres were parallel to the vertical axis with a prominent vasculature(**Figure 3**).

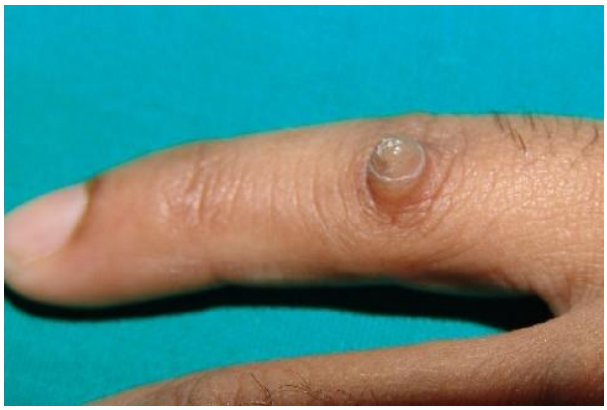

Figure 1

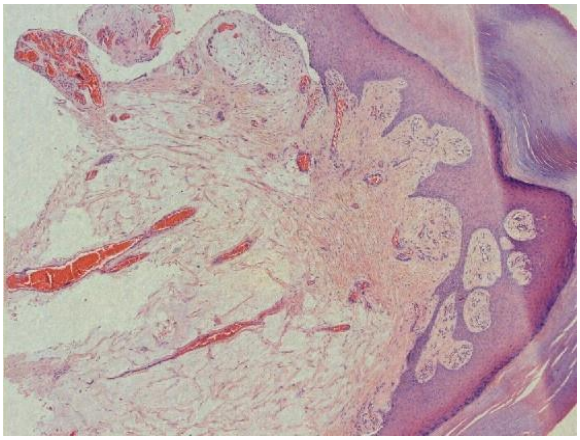

Figure 2 Low power photomicrograph (10X).

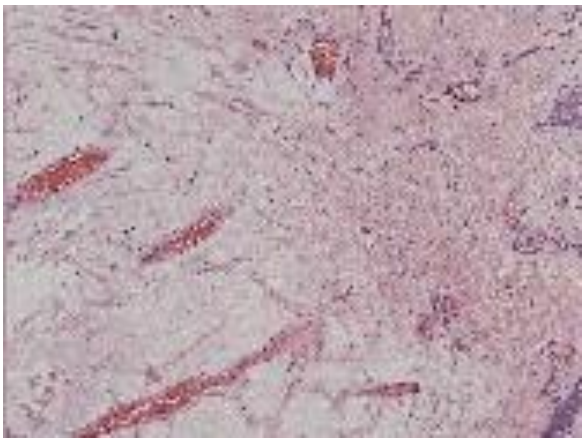

Figure 3 High power photomicrograph (50x).

The overlying epidermis showed hyperkeratosis with acanthosis.

What is your diagnosis?

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Diagnosis

Acquired digital fibrokeratoma.

Discussion

Acquired digital fibrokeratomas (ADF), are benign skin tumors frequently found on the distal extremities particularly the fingers and toes. It was Steel in 1965 who first described them as "Garlic clove fibroma".[1] Though distal extremities is a favoured site, lesions have been found to occur on the dorsa of hands, feet, palms, soles, ankle and the prepatellar region. The exact mechanism of tumor formation is unknown, but trauma is often thought to be a predisposing factor.[2] Generally the size of the tumors located on the digits is 3-5 mm but exceptionally there have been reported cases of giant acquired fibrokeratomas.[3] Lesions may be dome shaped, pedunculated or elongated. They may have a flat-topped, verrucous or hyperkeratotic surface. An important clinical differentiating sign is the presence of a collarette of slightly raised skin at the base of the lesion. They are almost always solitary, are seen in adults and do not usually regress. Simple excision is usually curative. Histopathological findings include thick intertwined collagen bundles oriented along the vertical axis of the lesion. Elastic fibres are usually present but are thin. There is also an increase in vascularity and the number of fibroblasts between the collagen bundles. Three histopathologically distinct subtypes of ADF have been described.[4] The most common one as described above, the second type with an increase in fibroblasts along the vertical axis of the tumor, with a marked decrease in elastic fibres and a third rare type with edematous poorly cellular stroma. In the differential diagnosis of ADF the following should be considered.[5] Verrucae or common warts caused by HPV are most commonly encountered distally however they do not have an epidermal collarette and often show surface changes along with thrombosed blood vessels. Pyogenic granulomas usually have a more consistent relationship to trauma, are more friable and histologically distinct. However as the lesion matures, increased fibrosis and decreased vascularity may make histologic differentiation difficult. Cutaneous horns usually demonstrate more hyperkeratosis than ADF and histology can usually distinguish between the two. A fibroma may clinically appear as ADF but elastic fibres are consistently lacking within the matrix of a true fibroma. Supernumerary digits almost always occur at the base of the metacarpophalyngeal joint, tend to be familial and are present at or soon after birth. They are bilaterally symmetrical, a phenomenon never seen with ADF. Histopathologically it is characterised by multiple nerve bundles within the dermal core. Koenen's tumors which are asymptomatic multiple periungual or subungual fibrous excrescences seen in tuberous sclerosis may be exceedingly difficult to differentiate histologically but the history and other cutaneous features of tuberous sclerosis help in making the diagnosis.

References

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