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WHAT'S YOUR DIAGNOSIS?

PEER REVIEWED

What Is the Growth on This Man's Finger?

Authors:
Kenneth Benson, MD; Michael Crandall, MD; and Erin Storie, DO
United States Navy

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A 43-year-old white man presented to the dermatology clinic with a small growth on his left index finger that had been present and growing for the past 11 months. When questioned about the onset of the growth, he reported associated mild trauma to the finger approximately 12 months ago when he had burned it with a cigarette. He denied any discharge or pain. He also denied a reduction in the range of motion of the finger.

The patient did not have a history of skin cancer or tuberous sclerosis, he did not regularly use sunscreen, and he denied having any other suspicious lesions on his body. A 10-system review was unrevealing.

Physical examination. On examination of this Fitzpatrick skin type 3 patient, a dome-shaped, 7-mm diameter, smooth, firm, flesh-colored papule was present at the lateral aspect of the proximal interphalangeal joint of the index finger of the left hand (**Figure**). A thin, mildly scaly hyperkeratotic collarette was visible around the lesion. There was no appreciable erythema or hypervascularity, nor were any thrombosed capillaries present.

Figure. *A dome-shaped papule at the proximal interphalangeal point of the first digit, with blue skin marker designating the site to be biopsied.*

The patient was afebrile, with vital signs within normal limits. He was alert and oriented, well-developed, and in no distress. He was normocephalic, with no scleral icterus, and no cervical lymphadenopathy. He had nonlabored breathing and regular heart rate and rhythm.

What's your diagnosis?

A. Verruca vulgaris

B. Pyogenic granuloma (lobular capillary hemangioma)

C. Cutaneous horn

D. Acquired digital fibrokeratoma

E. Acrochordon

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Answer: Acquired Digital Fibrokeratoma

Acquired digital fibrokeratoma (ADF), sometimes called acral fibrokeratoma, is an uncommon but benign skin lesion that predominantly occurs on the fingers and toes and is often associated with some degree of remote trauma. It is more commonly seen in men, and it often presents in middle age.

The morphology of ADF lesions can vary from a flesh-colored, well-circumscribed, dome-shaped plaque to a firm, fingerlike projection.1 Typically, the surface texture is smooth, but there can be some verruciform topography that may place warts or cutaneous horn high on the differential.

ADF at the distal digit may be mistaken for periungual fibroma (Koenen tumors), but clinical correlation, especially in the context of tuberous sclerosis, helps to guide diagnosis, given that periungual fibromas occur in nearly 50% of persons with tuberous sclerosis.2,3 One of the hallmarks of ADF is the hyperkeratotic collarette present at the base of the lesion that sometimes has a scaly appearance.

Microscopically, the polypoid lesion may have thick, dense, vertically oriented collagen fibers and elastic fibers with normal to substantial dermal proliferation of stellate fibroblasts.4 Larger lesions will have a well-established vascular supply, but nerve tissue is either absent or inconspicuous.5 The epidermis also may have variable presentation, but classic features include a varying degree of papillomatosis with acanthosis and orthokeratosis.

Although the ADF lesion is benign, possible secondary complications may warrant removal, such as reduction in range of motion of the adjacent joint, or cosmetic/aesthetic discontent. While there is no single well-established modality to remove the ADF, numerous destructive procedures are accepted in the dermatologic community. Perhaps the most common form of lesion destruction is, coincidentally, a shave biopsy to confirm the diagnosis. It should be noted that there is an inherent risk of return of the lesion, especially in the periungual areas of the

toes.6 Other procedures used for ADF resolution include cryotherapy, curettage, cauterization, and surgical excision (to include full-thickness excision with secondary intention healing).7

Outcome of the case. After a shave biopsy to confirm the diagnosis, the patient was informed of the benign nature of the ADF based on clinical and histologic examination findings. He followed up 6 months later with minimal scarring at the shave site and no recurrence. He was advised to follow up as needed.

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The views expressed in this article are those of the authors and do not necessarily reflect the official policy or position of the Department of the Navy, the Department of Defense, or the US Government.

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