

CLINICAL IMAGE

A 35-year-old female Central Africa Republican refugee with an uneventful medical and family past histories presented to a hospital with a 3-year history of a progressive painful outgrowth of the five nails of the left hand

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Abstract

Onychogryphosis is a dermatological disease characterized by hypertrophy, opaque or yellow-brown thickening, gross hyperkeratosis, elongation, and excessive curving of the nail plate, especially that of the big toe of the foot. The resultant nail deformity is often termed “ram’s horn nail” or “claw-hand” deformity. Affected patients suffer mainly from pain, and cosmetic concerns. This disorder can be acquired or congenital. Herein, we present the case of an usual form of acquired onychogryphosis affecting all the five nail plates of the left hand in a bit to raise awareness of demaytologist and podiatricians on the occurrence of this a typical form for a timely diagnosis and treatment, especially in resource-limited settings where this disease is rare or perhatrps under-diagnosed. We also briefly discuss its diagbosis and management.

On examination, the nail plates of the left hand were brownish–yellowish, long, thickened, curved and circular, giving the appearance of a ‘claw-hand’ deformity (Fig. 1A). The skin of the left hand was moderately numb, hyper-keratinized and stiff. All distal pulses were present. The affected hand was tender on passive and active mobilization with partial functional impotence. Fungal culture of the affected five nails was sterile. The diagnosis of five fingernail onychogryphosis was made. Surgical excision of the fingernail overgrowths was performed. She had a regular postoperative course (Fig. 1B).

DISCUSSION

Onychogryphosis often affects the great toenail of the foot in neglected elderly or homeless people [1], as seen in our refugee patient probably subject to some degree of neglect. It rarely affects all the fingernail of the hand as seen in the present case [2]. This disease can either be congenital or acquired [1]. The case points more to an acquired onychogryphosis (see Table 1). The diagnosis of onychogryphosis is mainly clinical on the basis of the following features: thickened, long, curved and circular nail

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Figure 1: Palmar views (A) before and after surgery (B).

Table 1: Differences between acquired and congenital onychogryphosis [1]

Clinical features	Acquired onychogryphosis	Congenital onychogryphosis
Family history of onychogryphosis	No	Often present
History of long-standing poor personal care or neglect or homelessness	Yes	No
Age at onset	Adults or elderly people	Present at birth or onset before the age of 1 year or during puberty
Affected nails	Affects mainly the great toe	Nails of both hands and feet
Associated diseases	Senile dementia, ichthyosis, psoriasis, pemphigus, syphilis, variola, hyperuricemia, varicose veins, stasis dermatitis, ulcers of the lower legs, traumatic injuries to the nails, onychomycosis and thrombophlebitis	Haim-Munk syndrome, palmoplantar hyperkeratosis, severe early-onset periodontitis, pes planus, arachnodactyly, acroosteolysis, Papillon-Lefèvre syndrome, ichthyosis hystrix and ectodermal dysplasia-syndactyly syndrome type I

plate in the cross section with gross hyperkeratosis giving the affected hand the appearance of a 'ram's horn nail' or 'claw-hand' as seen in our patient [1].

Treatment is important for cosmesis and for aversion of its most severe complication called subungual gangrene. Onychogryphosis can be treated conservatively or surgically depending on the vascular supply to the hand [1]. Conservative treatment modalities are regular use of electric drills or debridement with a dual-action nail nipper or nail cryotherapy [3]. Surgery entails nail avulsion, blunt nail dissection, electrodesiccation, chemocauterization or matricectomy.

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CONFLICT OF INTEREST STATEMENT

The authors declare that they have no competing interests.

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Not applicable.

ETHICAL APPROVAL

We were granted approval by the directorate Batouri District Hospital and the Ethical committee of the East Region Delegation of Public Health of Cameroon.

CONSENT

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

GUARANTOR

Joel Noutakdie Tochie, MD.

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