Occupational marks in a coconut tree climber

Sir,

A 40-year-old man presented with asymptomatic hyperpigmentation and thickening of skin over bilateral forearms. These lesions were not associated with itching or oozing at any time in the past. He worked as a professional coconut tree climber in various farms. On further questioning, he revealed the presence of these lesions for the past 20 years, which were the result of his using both forearms and the feet to grip the tree while climbing, as he pulled himself up to pluck coconuts. He denied using the help of any belt or support while doing so. Usually, he takes a maximum of 4-5 minutes to climb up, but comes down within 30 seconds. During this work initially, he used to suffer from minor abrasions when he had just learnt to climb, but later, he realized his skin was totally adapted to his work.

On examination, skin over both forearms on the flexural aspect was hyperpigmented and lichenified with linear striations [Figure 1] at regular intervals, resembling the bark of the coconut tree. Bilateral palms and soles showed focal yellowish callosities with loss of dermatoglyphic markings. Similar skin changes were not seen over the skin of lower legs. Nails were normal. No erythema, fresh cuts, abrasions, or erosions were seen on the skin. On the basis of the above findings, a diagnosis of frictional occupational dermatosis was made, and the patient was counselled about this.

Mechanical trauma, an accompaniment of many occupations, is the primary factor in approximately 6% cases of occupational skin diseases.[1] Friction is the most common type of mechanical trauma, ranging from mild interrupted friction, producing lichenification and hyperpigmentation, to heavier and more persistent friction, which produces callosities and nail damage.[2] The effects of trauma are modified by humidity, sweating, age, sex, nutritional status, infection, and genetic and racial factors. Friction blisters can also occur with sudden shearing force, but it seldom occurs on loose skin which stretches easily.

Occupational marks are effects of a particular occupation on the worker’s skin.[1] Earlier such marks were common among workers. Today with increasing automation, less frequent manual operation of tools, better protective clothing, such occupational marks have become less frequent.[3] Various occupations like plumbing, pipe fitting, machining, postal work, solid waste handling, athletes, musicians, computer
operators, and data-entry typists have been reported to have these occupational marks. Years of repeated low-level friction on hands result in a condition known as chronic hypertrophic dermatosis of palms.[2] Some special examples include ‘pulling boat hands’, rower’s rump, surfer’s or athlete’s nodules, fiddler’s neck, Garrod’s pads, harpists fingers, guitar nipple, cellist’s knee, flutist’s chin etc.[3]

Coconut tree climbing is practised in various southern Indian states of Kerala, Karnataka, Tamil Nadu, Lakshadweep Island, Middle East Asian countries, South East Asian countries, Australia, African countries, and Indian sub continent countries. The technique of gripping the tree with both hands and feet, and then pushing up the body to climb higher, results in intermittent pressure over the forearm skin, palms, and soles. In response to friction, there is a steady rate of increase in epidermal turnover, and laying down of thickened, vertically oriented collagen bundles in papillary dermis, resulting in lichenification.[3] Abrasions facilitate the entry of allergens and irritants into the skin, contributing sometimes to irritant and allergic contact dermatitis. But in our case, there was no evidence suggestive of irritant or allergic contact dermatitis. These callosities do not require treatment unless they develop fissures, as they should be considered as an adaptation rather than disability. Callosities developing in coconut tree climbers have been previously reported in 3 isolated case reports from India.[4-6] Our case highlights the severe degree to which the skin can adapt, in response to frictional forces in this unique occupation. Full sleeved shirts, gloves, or a new innovation in climbing coconut trees, could limit this occupational dermatosis in India as well as other countries, where coconut tree climbing is common.

REFERENCES

Rashmi Kumari, Devinder M. Thappa, K. N. Shivaswamy
Departments of Dermatology and STD, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Pondicherry, India.

Address for correspondence: Dr. Devinder Mohan Thappa, Department of Dermatology and STD, JIPMER, Pondicherry - 605 006, India. E-mail: dmthappa@jipmer.edu

Oral montelukast monotherapy is ineffective in chronic idiopathic urticaria: A comparison with oral cetirizine

Sir,
Chronic idiopathic urticaria (CIU) is a common cutaneous disorder, for which there is usually no identifiable cause.[1] H1-receptor antagonists are recommended as the first-line treatment in CIU. Chronic urticaria, which cannot be classified in any of the known causes, is described as chronic idiopathic urticaria. Recently, antileukotriene receptors such as montelukast, have been used, either as monotherapy, or in combination with H1-receptor antagonists.

We conducted a study to compare the efficacy of oral montelukast with oral cetirizine in the treatment of chronic idiopathic urticaria. Twenty patients (12 females and 8 males) in the age group of 20 to 60 years (mean age 31.2 years) with chronic urticaria, were enrolled in the study after an informed written consent. Exclusion criteria were physical urticaria, urticarial vasculitis, pregnant or lactating women, a