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Occupational Marks in Coconut Tree Climbers.

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ABSTRACT

We report a case of fatal fall in a coconut tree climber with regard to appearance of occupational marks in coconut tree climbers, and their implications in reference to the hazards associated with the occupation.

Keywords: Coconut tree climbers; Occupation marks; Identification; Fatal falls

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INTRODUCTION

On any given Sunday morning at any one of the numerous beaches along the vast southern coastline that the Indian subcontinent boasts of, a man - a climber can be spotted scurrying up a coconut tree through a style/ method quite unique in itself and in a manner similar to which an everyday frog hops around. It is unique in itself because this art/occupation has no formal means of education/schooling and one can safely assume that it is either self-taught through years of trial error or passed on from father to son through generations. Why the sight is comparable to that of a frog hopping can easily be deduced from the fact that the mechanism through which a climber climbs his tree involves a tight gripping of the tree trunk with both hands and feet in flexion (Which are in close proximity at the base), followed by a subsequent thrust of power from the legs/feet thereby propelling the climber up the tree with extension at the knee joint [1-3]. With each propulsion, the climber ascends the tree only to fasten his grip yet again using his hands and feet at the new level-much like an everyday frog hopping around, except that this is a 'vertical hop' of sorts.

We report a case of fatal fall in a coconut tree climber with regard to appearance of occupational marks in coconut tree climbers, and their implications in reference to the hazards associated with the occupation.

Case Report

On the fateful day, a 55- year old coconut climber sustained a fatal fall at work, and was immediately taken to the hospital for treatment. He had sustained multiple fractures of the skull and facial bones, fracture of cervical spine (C6) and compression fracture of thoracic spine (T12), along with fractures of the femur and patella on the left side. The victim succumbed to his injuries on the 7th day of the incident. Hyperpigmentation and thickening of the skin on the extensor surface of forearms and flexures of ankles were obvious (Figure 1) and concomitant with the occupation the victim was engaged in.

Figure 1: Hyperpigmentation and thickening of the skin on the forearms and ankle



DISCUSSION

The exhaustive and interesting articles on coconut tree climbers are published by George *et al.* [1,2]. Over years of active climbing by the coconut climbers, occupational marks tend to form which can be attributed primarily to friction that results in a variety of manifestations on the climbers body ranging from hyper-pigmentation to callosities depending on his duration in the trade [3]. Thus, it comes as no surprise that there is documented proof of such marks in coconut climbers on the flexural aspects of the forearms, palms and soles. The location and extent of these marks may obviously vary based on the technique and style of climbing as well as the duration in the occupation. The location and extent of occupational marks as observed



in our case (especially the ones all along the extensor surface of forearm) is quite different from those reported in literature [2,3] and raises two possibilities. One, that the coconut climber was not instructed in an appropriate manner during his 'informal' training and this lack of technique possibly resulted in his falling and subsequent demise, while the other possibility may be related to different techniques followed by different groups of climbers in different regions.

These possibilities further raise the question as to whether a more formal mode of education about techniques of scaling coconut trees with due protections is required to prevent such accidents given that the profession is not so uncommon along the southern coastline of India.

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