**Case Report**

**Acute Onset of Painful Hairy Eruption on Dorsum of Foot: An Interesting Story!**

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**ABSTRACT**

Caterpillar dermatitis is a commonly observed dermatological condition in tropical countries. Contact with caterpillar can cause localized stings, eczematous or papular dermatitis, urticaria, and in some cases life-threatening reactions. We report a case of a patient presenting with acute-onset painful hairy eruption on dorsum of the left foot near great toe. Detailed history and investigations led to appropriate diagnosis.

**Key words:** Hairy caterpillar dermatitis, hypertrichosis, lepidopterism, tropical dermatology

**INTRODUCTION**

Caterpillar dermatitis (lepidopterism) is a disease caused by hairs of butterflies, moths, and their caterpillars. Various species produce array of dermatitis in humans, ranging from mild erythema and pruritus to extreme itching, skin irritations, damage to eyes, respiratory system, and anaphylactic shock.

**CASE REPORT**

A 54-year-old male presented with sudden appearance of new hairs over the dorsal aspect of his left foot [Figure 1]. It was preceded by severe itching and burning pain. On close observation, there were straight brown easily pluckable coarse hairs, quite distinct from his other body hairs, with surrounding slight erythema and scales. On further probing, the patient gave a history of removing caterpillar from his shoes a day prior. His routine blood investigations were unremarkable. Under the light microscope, at ×40 magnification microscopy, these hairs appeared light brown with cealomic appearance, very unlike human hair [Figure 2]. Histology of the lesion was suggestive of acute spongiotic eczema. Entomological examination of the caterpillar, which patient brought from his home, revealed an oak processory caterpillar i.e., *Thaumetopoea processionea* [Figure 3] having same hairs/setae as observed over the patient’s foot. The patient’s symptoms improved with the removal of hairs with cellophane tape initially and later by forceps along with oral levocetirizine 10 mg at night and twice daily application of topical mometasone furoate 0.1% w/w cream.

**DISCUSSION**

Caterpillars are the worm-like larval forms of *Lepidoptera*. Moths and butterflies are the reproductive phase of *Lepidoptera*, which after mating lay eggs from which caterpillars hatch. Caterpillars are the growing phase of *Lepidoptera*. Lepidopterism is a term used to denote

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and anticomplement activity. It may also cause immediate or delayed-type hypersensitivity.\(^2\) Caterpillar setae of the oak processionaly caterpillar are easily detachable and can be widely dispersed by winds, causing dermatitis and ophthalmic complications such as chemosis, granuloma, iritis, vitritis, retinitis, or endophthalmitis. Goldman et al. found that setae of various caterpillars (unidentified species) had no direct irritating properties when inserted into the skin, arguing that only the chemicals carried by the setae are able to cause adverse reactions.\(^3\) Interestingly, our patient’s predominant symptom was only painful hypertrichosis without dermatitis, due to retention of setae supporting this hypothesis, and this kind of patient’s presentation is rarely reported.

Treatment of lepidopterism is based on symptoms. Removal of setae via forceps or cellophane tape stripping and immediate washing with soap and water along with oral antihistamine, analgesics, and topical and/or oral steroids are the mainstay of treatment.\(^4\)

High level of suspicion and a history of contact with moths or caterpillars should be evaluated when the patient presents with acute, unexplained, localized hypertrichosis associated with or without dermatitis.

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understands that name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

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**Conflicts of interest**

There are no conflicts of interest.

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