

# CosmoDerma





Visual Treats in Dermatology

# Unilateral toasted skin syndrome

Logamoorthy Ramamoorthy<sup>1</sup>, Anas Kololichalil<sup>1</sup>

<sup>1</sup>Department of Dermatology, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, India.



### \*Corresponding author: Logamoorthy, Ramamoorthy, Department of Dermatology, Jawaharlal Institute of Postgraduate Medical Education and Research,

logamoorthy.r@gmail.com

Puducherry, India.

Received: 18 August 2022 Accepted: 24 August 2022 Published: 05 September 2022

DOI

10.25259/CSDM\_89\_2022

Quick Response Code:



A 36-year-old female came with asymptomatic skin lesions over the left leg of a 1-year duration. On examination, a reticulate non-blanchable hyperpigmented net-like pattern was observed over the left shin [Figure 1]. The right leg was normal and no similar lesions elsewhere in the body. She gave the history of prolonged exposure to heat while cooking in front of an earthen oven with a wood-burning fire on the ground and having tied her saree above the knee to prevent fire particles from damaging the clothes. Thorough history taking and clinical examination revealed a diagnosis of unilateral toasted skin syndrome. The patient was advised to avoid exposure to heat and cover the legs with clothes while cooking.

Erythema ab igne is derived from the Latin word which means "redness from fire." It is also called fire stains and toasted skin syndrome. It is caused by chronic long-term exposure to infrared radiation. Although the pathogenesis is poorly understood, studies have shown that heat acts synergistically with ultraviolet (UV) radiation to denature DNA in squamous cells in vitro and chronic UV rays exposure leads to photoimmunosuppression as an adaptive response. Initially, there is transient reticulate erythema which is blanchable; later, it evolves into dusky



Figure 1: Reticulated hyperpigmented net-like macule over the shin of the left leg shin sparing the right leg.

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, transform, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms. ©2022 Published by Scientific Scholar on behalf of CosmoDerma

hyperpigmentation, which is fixed and non-blanchable. Usually asymptomatic but sometimes associated with a burning sensation.[1] In India, cooking in front of the chulha (low open earthen Indian oven) is common in rural women resulting in long-term exposure to infrared radiation. Prolonged exposure to heat without covering legs with proximity to chulha leads to toasted skin syndrome over the legs. Lifestyle modifications and avoidance of chronic exposure to heat help in the treatment of erythema ab igne and prevent the development of squamous cell carcinoma in long-standing cases.[2] The primary treatment is avoidance of heat source and topical hydroquinone or retinoids are used for treating the persistent hyperpigmentation.

## Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

### Financial support and sponsorship

Nil.

#### **Conflicts of interest**

There are no conflicts of interest.

#### REFERENCES

- Kar S, Krishanan A, Preetha K, Mohankar A, Singh N. Erythema ab igne (Unilateral) due to "Chulla". Med J DY Patil Univ 2014;7:529-30.
- Basavaraj KH, Kanthraj GR, Shetty AM, Rangappa V. Erythema ab igne in a rural Indian woman. Indian J Dermatol Venereol Leprol 2011;77:731.

How to cite this article: Ramamoorthy L, Kololichalil A. Unilateral toasted skin syndrome. CosmoDerma 2022;2:70.