

## Case Report

# Soothing a sore back comes with consequences for the skin

BY DR. SAMIR N. GUPTA

**A** 45-year-old heavy-set female presented to our dermatology centre in early March with a four-month history of a progressive asymptomatic reticulated (fishnet or lace-like) dermatosis involving her entire back. The condition did not involve her chest or her extremities. Her past medical history was unremarkable and she was not taking any medication. There was no history of connective tissue disease, photosensitivity or trauma. She did report a trip to Cuba two months ago where she sunbathed frequently. She works as an office clerk and often used a heating pad at her desk to soothe a stiff back.

She initially self-medicated with hydrocortisone cream for seven days with no improvement. She was subsequently evaluated by her physician and diagnosed with tinea versicolor. She was unsuccessfully treated with topical antifungal creams and shampoos. She felt her condition was progressing. A referral to dermatology was made. She was worried that her skin condition could spread to her face and was inclined to have a biopsy. The clinical history and physical examination confirmed a diagnosis of erythema ab igne.

## Etiology

Erythema ab igne is a reticulated skin condition caused by repeated and persistent exposure to low levels of thermal infrared radiation (heat). The exposure levels are not high enough to cause a true thermal burn. The term is derived from Latin and translates to “redness from fire.”

The most common heat sources responsible for erythema ab igne include fireplaces, radiators, portable heaters, heating pads and hot water bottles. Laptops and heated car seat have also been implicated.

Traditionally, individuals with occupational exposures such as welders and bakers were most commonly affected by the condition. And although the advent of central heating has reduced the incidence of erythema ab igne, it is still seen in clinical practice.

The condition is more common in the elderly, who tend to use portable heaters, heating pads and hot water bottles frequently during the cold winter months. However, anyone can be affected.



Frequent heating pad use has caused reticulated erythema and hyperpigmentation in this 45-year-old patient.

## Presentation

Erythema ab igne presents with reticulated erythema and hyperpigmentation over the area of skin exposed to the heat source. Telangiectasia, scaling and atrophy can also occur. The condition is slowly progressive and usually asymptomatic, although burning has been reported.

Thermal keratosis, squamous cell carcinoma in situ and squamous cell carcinoma are extremely uncommon sequelae of erythema ab igne.

## Diagnosis

The diagnosis of erythema ab igne is clinical and a biopsy is often not required unless there is a suspicion for evolving malignancy

(non-healing areas). The main differential diagnosis to rule out is livedo reticularis, which also presents as a fish-net reticulated dermatosis that can be associated with lupus. Poikiloderma is a mottled skin dyschromia usually seen on the neck (farmer's neck) that occurs in response to prolonged UV exposure in adults. Reticulated papillomatosis is a reticulated skin condition that typically occurs on the trunk, but is scaly. Tinea versicolor can present with hyper- and hypopigmentation but is not reticulated.

## Treatment

The treatment of erythema ab igne involves reassuring the patient of its benign nature and eliminating exposure to the heat source. The fishnet-like erythema usually improves over time, but the resulting hyperpigmentation can persist indefinitely. Topical retinoids, steroids and 5-fluorouracil have been used to treat the condition. Bleaching creams can be helpful in improving the hyperpigmentation.

Our patient was educated about the nature of her condition and the relationship to her heating pad. After she stopped using the pad, her condition improved over three months; however, she was left with some residual hyperpigmentation.

**Treatment of erythema ab igne involves reassuring the patient of its benign nature and eliminating exposure to the heat source.**

—Dr. Samir N. Gupta

*Dr. Samir N. Gupta is a consultant dermatologist in Toronto and chair of the Ontario Medical Association's section on dermatology.*

*This report is based on a real patient. Want to contribute a case? Please contact [andrew.skelly@medicalpost.rogers.com](mailto:andrew.skelly@medicalpost.rogers.com).*