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A reticular eruption on the thighs

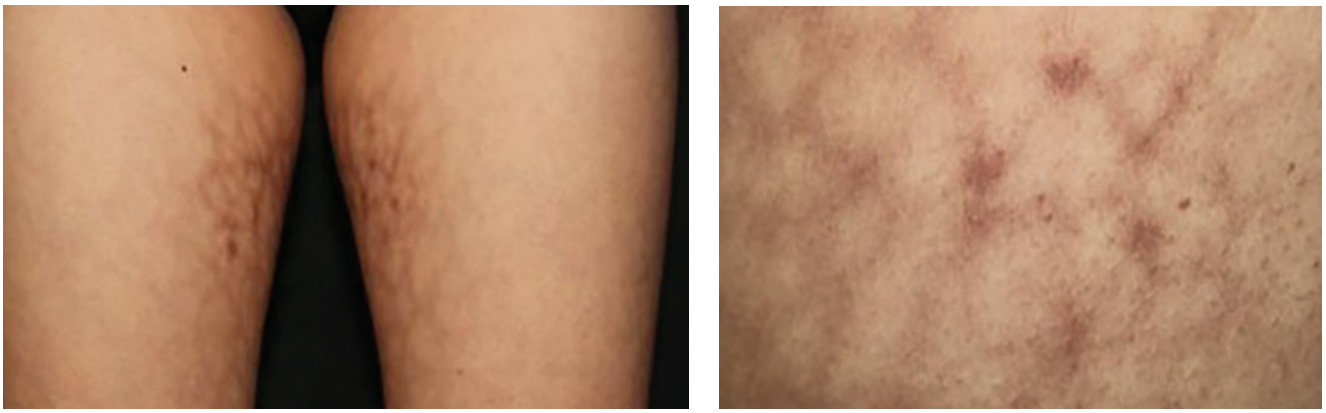

Figure 1. Reticular, nonblanchable, brownish pigmentation with mild erythema and telangiectasias on the patient's inner thighs.

A 17-year-old girl presented to our dermatology clinic with a 2-month history of an asymptomatic reticular rash on both thighs. The patient was previously healthy and had not recently taken any new medications. Due to the cold winter weather, she had been wearing an electric heating pad between her thighs for the previous few months.

Physical examination revealed a reticular, nonblanchable, brownish pigmentation with mild erythema and telangiectasias on the inner thighs (**Figure 1**), diagnosed as erythema ab igne. She was advised to discontinue use of the heating pad, and 6 months later the rash had completely resolved without any other intervention.

ERYTHEMA AB IGNE

Erythema ab igne is caused by repeated or prolonged exposure to heat from 43°C to 47°C (109°F to 117°F), which is below the thermal burn threshold.[1] Common heat sources include wood stoves, open fires, laptops, tablets, neurostimulators, telephones, electric heaters, heated blankets, heated patches, and virtual-reality headsets.[2] Underlying medical conditions for chronic heat exposure must also be considered, such as chronic pain, pancreatitis, and peptic ulcer disease, as patients with these conditions often resort to local hot compresses for pain relief.[1] Our patient had no history of any of these underlying conditions.

The lesions of erythema ab igne appear as reticular hyperpigmentation due to hemosiderin and melanin deposition and may be associated with atrophy, telangiectasia, and bullae.[2] It is usually asymptomatic, but a few patients report mild burning or itching.[2] Lesions usually resolve spontaneously within several weeks to months after removal of the heat source and do not require treatment. Although the lesions resolve in most patients, hyperpigmentation in a few patients may not disappear completely after several months. Therefore, laser treatment and topical hydroquinone are considered options for cosmetic purposes.[2,3]

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The differential diagnosis

Erythema ab igne is usually easy to diagnose from the clinical presentation alone, but care must be taken to distinguish it from livedo reticularis and livedo racemosa.

Livedo reticularis is a cutaneous physical sign characterized by a transient or persistent, reddish-blue to purple, reticular, cyanotic pattern with or without any evidence of systemic disease.[4] It results from reduced blood flow and lowered oxygen tension at the periphery of the skin segments caused by functional or organic disorders such as vasospasm, arteriolar wall inflammation, and intravascular obstruction.[5] Compared with livedo reticularis, the reticular pattern of livedo racemosa is permanent and often has irregular and incomplete reticular segments with a more generalized distribution.[6] Livedo racemosa is always secondary and is often associated with antiphospholipid syndrome, systemic lupus erythematosus, thromboangiitis obliterans, polycythemia vera, and polyarteritis nodosa.[4,6]

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DISCLOSURES

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