

# What's Causing This Rash?

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A 27-year-old Haitian female is worried about an asymptomatic rash on her abdomen, which appeared a few months ago (Figure 1). Her past and present history is irrelevant except for some menstrual cramps, for which she occasionally takes a non-steroidal anti-inflammatory drug.

## What is your diagnosis?

This is a typical case of erythema ab igne, a reticular, telangiectatic, and pigmented dermatosis caused by a prolonged or repeated exposure to infrared radiation insufficient to cause thermal burns.

Erythema ab igne affects both men and women and may involve any part of the body, depending on the nature of the radiation source (*i.e.*, hot water bottles, heating pads, electric blankets, radiators, and fireplaces/stoves).

A single exposure to infrared radiation of sub-threshold intensity causes a reticular erythema that is mild and transient. Protracted or repeated exposure to heat induces a more pronounced erythema with hyperpigmentation. Epidermal atrophy occasionally



Figure 1. Erythema ab igne

ensues. The cutaneous changes may fade initially, but tend to become permanent with repeated exposures.

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## What else could it be?

The differential diagnoses include:

- livedo reticularis,
- poikiloderma atrophicans vasculare, and
- livedoid vasculitis.

## How is it treated?

The mainstay of treatment is avoidance of the causative infrared radiation source. When the cutaneous changes become chronic and hyperpigmented, different therapeutic modalities may improve the appearance of the lesions. Treatment options include:

- laser (Nd:YAG, ruby, or alexandrite),
- topical tretinoin,
- hydroquinone, and
- topical 5-fluorouracil.

Potential long-term complication of erythema ab igne include the occurrence of squamous cell carcinomas in the involved area. [CME](#)

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