# PHOTO QUIZ FROM FAMILY MEDICINE

# Woman with an Unusual Rash A Reticular Hyperpigmented Dermatosis

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#### CASE HISTORY

A 47-year-old female presented to her family physician's office with chronic low back pain, and a rash over her lower back. She had undergone a laminectomy six months earlier, followed by physical therapy. Her back pain had improved initially, but it had returned two months ago. She was taking ibuprofen, and variously applying heat or ice without relief. She is inquiring about the possibility of restarting the opiate pain medication she had been taking prior to surgery.

She also reports a rash over her lower back that she had first noticed about two months ago. She thinks it started in a small area about the size of a quarter, and it seemed to spread over her lower back. The rash was not painful or pruritic.







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Her medications include albuterol, Vitamin B12, cetirizine, ibuprofen, lamotrigine and omeprazole. There were no recent changes in her medications.

#### PHYSICAL FINDINGS

Examination of the lower back revealed a surgical scar consistent with prior laminectomy, a prominent tattoo, and hyperpigmented skin with non-blanchable brown macules in a reticular pattern.

What is the diagnosis?<sup>1,2</sup>

- 1. Delayed hypersensitivity to tattoo dye
- 2. Livido reticularis
- 3. Lamotrigine drug eruption
- 4. Erythema ab igne

## **BIOPSY RESULTS**

Punch biopsy revealed vacuolar changes along the dermo-epidermal junction, and a sparse, superficial, perivascular lymphocytic infiltrate that contained melanophages. There was no evidence of vasculitis.

The findings, together with the history, were suggestive of erythema ab igne.<sup>3</sup>

### DISCUSSION

Erythema ab igne, also known as "toasted skin syndrome" or "fire stains," is caused by chronic exposure to heat below the threshold for burns. It was more common prior to the advent of central heating, due to heat exposure from open fires and stoves, and often affected the shins. Currently, more common causes include other exposures to heat, such as heating pads, heated

car seats,<sup>4</sup> holding a laptop on the thighs,<sup>5</sup> and occupational exposures such as in foundries and bakeries.

Erythema ab igne initially presents with blanchable erythema in a characteristic reticular pattern in the area of heat exposure. Over time the erythema develops into brown hyperpigmentation (from melanin and hemosiderin) in a similar pattern that is no longer blanchable. The treatment is removal of exposure to the heat source. In patients who are using heat for treatment of pain, the cause of the pain should be identified. Removal of heat should bring about spontaneous resolution of the hyperpigmentation over time, but it may be permanent.

In this case the patient stopped applying heat, and the hyperpigmentation resolved completely within two months.

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