

IMAGES IN EMERGENCY MEDICINE

Toxicology

An outside job

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1 | PATIENT PRESENTATION

A 29-year-old man presented to our emergency department with a sharply demarcated, geometric, hyper-pigmented plaque on his right face, which extended from his nose to his ear, with scattered crusts and erosions (Figure 1). His right eyelids were edematous and closed; the skin was exquisitely tender to palpation. His standard ophthalmic examination was otherwise negative. Magnetic resonance imaging (MRI) showed generalized soft tissue edema of the right face without orbital involvement.

Four days earlier, he had developed erythema and edema of his right eyelids, and he was treated at another hospital for preseptal cellulitis. In the next 12 hours, clustered bullous eruptions rapidly spread across his right face.

2 | DIAGNOSIS

2.1 | Bullous drug eruption due to capsaicin

On review of prior medical records, symptom timeline, and the patient's cell phone photographs, the skin changes were deduced to be due to the local application of topical 0.25% capsaicin ointment, initiated at the previous hospital for pain control. Bullous drug eruption is a rare adverse event characterized by localized or generalized blisters and erosions, which may be pruritic and painful.¹

Capsaicin is an active component of chili peppers.² Initial neuronal excitation is followed by a long refractory period called desensitization.³ It is used as an analgesic for the temporary relief of



FIGURE 1 Sharply demarcated hyper-pigmented plaque on right face extending from nose to ear. Crusts on eyelids, nose, and ear. Hyper-pigmented plaque on right hand (inset).

minor aches of muscles and joints, as well as for peripheral neuropathy from shingles, HIV and diabetes. It is available as ointments and patches, typically in concentrations between 0.025% and 1%.⁴ Application to the face has been reported as safe.⁵

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