A 31-year-old woman presented to the dermatology department with an asymptomatic erythematous patch on the dorsum of her right foot (Figure 1A). She had taken 1 dose of doxycycline (100 mg) the previous day as empirical treatment after picosecond laser treatment for acne scars. She had had a similar episode the previous year on the same site, after taking the same dose of doxycycline after laser treatment (Figure 1B). She had no notable medical history, and no other local or systemic symptoms, including fever.

The erythematous patch was well demarcated, with a central dusky zone. There was no tenderness, heat or discharge. We diagnosed a fixed drug eruption and prescribed clobetasol propionate. After 1 week of treatment, the lesion had resolved. Although patch testing was negative, an oral rechallenge with 100 mg doxycycline was positive.

Fixed drug eruptions are common, and constitute 14%–22% of cutaneous drug reactions among children. They are type IV hypersensitivity reactions that appear within 1 week after initial drug exposure, but may occur within minutes upon re-exposure.

Fixed drug eruptions are characterized by well-circumscribed, round or oval, erythematous patches, plaques or, less frequently, bullae with a dusky-grey centre. They occur most commonly after exposure to acetaminophen, nonsteroidal anti-inflammatory drugs, anticonvulsants and antibiotics. The lips, the anogenital area and previous trauma areas are the most common sites.

The diagnosis is clinical, but skin biopsy, topical patch test, lymphocyte transformation test or systemic rechallenge may help identify the causative drug. Differential diagnoses include erythema multiforme, contact dermatitis, cellulitis and herpes simplex infection. Systemic antihistamines and topical corticosteroids may be required for symptomatic relief. The condition is usually self-limiting; however, hyperpigmentation may remain. Patients should avoid re-exposure to the causative drug; local recurrence commonly occurs, although extensive lesional blistering has been reported.

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References