

Bullous Fixed Drug Eruption Caused by Etoricoxib Confirmed by Patch Testing



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A 51-year-old woman, with an unremarkable medical history, was referred to the allergy department for a suspected perioperative generalized drug reaction. She presented a history of 1 episode of multiple violaceous, pruritic, and painful plaques on her shoulders and elbows, and a violaceous bullous lesion on her right upper thigh. These lesions appeared 24 hours after an arthroscopic knee surgery. She also recalled a history of a bullous lesion on her right upper thigh 1 year before, after receiving treatment for shoulder pain. She did not recall any accompanying symptoms. Physical examination revealed hyperpigmentation in the areas of previous lesions. Accompanying photos of acute lesions (Figure 1, A), along with the described findings, were consistent with a bullous fixed drug eruption (FDE).

To identify suspected drugs, electronic prescription records were reviewed, and identified that only etoricoxib was used on both occasions. She recalled having started the drug 12 hours after knee surgery. The patient did not receive other coxib prescriptions in the time between the 2 episodes.

Patch tests with etoricoxib and celecoxib (at 10% and 30% in petrolatum) were performed in the upper back and in lesional skin (thigh), all inducing new violaceous, bullous lesions in the

previously affected areas (Figure 1, B) and negative on the back, confirming the suspected diagnosis of bullous FDE induced by coxibs. Drug provocation was not performed. The patient was instructed to completely avoid this drug class and a drug allergy alert was entered in her electronic health record. She has now been lesion free for more than a year now.

FDE is a delayed-type hypersensitivity reaction, characterized by the appearance of violaceous, pruritic, round lesions, occasionally with central blistering, that usually regress with hyperpigmented, postinflammatory macules.¹ These typical lesions appear several days after the intake of the offending drug, but can arise in less than 24 hours on reexposure, always at the same anatomical sites. They can appear anywhere in the body but tend to prefer the genitalia, oral mucosa, and lips.

Intraepidermal CD8⁺ effector/memory T cells are mostly located in the epidermis of hyperpigmented patches, playing a fundamental role in the FDE's characteristic reactivation of localized lesions.¹ Nonsteroidal anti-inflammatory drugs are one of the most commonly offending drugs, followed by antibiotics and anticonvulsants. However, most adverse cutaneous reactions to coxibs have been attributed to celecoxib, rofecoxib,

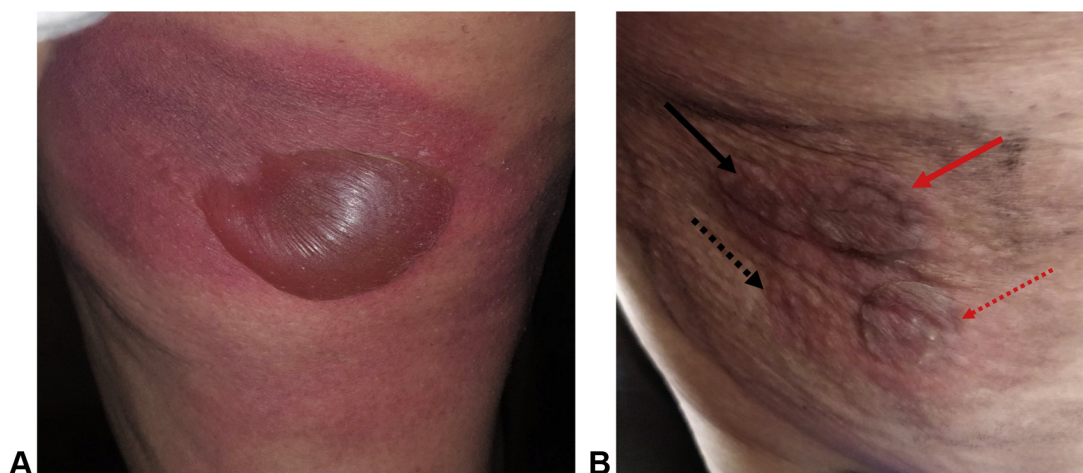


FIGURE 1. A, Acute bullous lesion on the right upper thigh. B, Positive skin test results on lesional skin. Solid black arrow, celecoxib 30%; dotted black arrow, celecoxib 10%; solid red arrow, etoricoxib 30%; dotted red arrow, etoricoxib 10%.

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or valdecoxib. Etoricoxib-induced FDE has been seldomly reported.²

A diagnosis of FDE is usually straightforward in acute episodes. In this case, despite the inaccurate referral information and absence of a suspected drug, the combination of typical post-inflammatory hyperpigmented areas, photos of acute lesions, history of a similar episode, and the information provided by electronic prescription records established the diagnosis. Patch tests confirmed the involvement of coxibs without the need for oral provocation. Although some patients allergic to etoricoxib

can tolerate celecoxib due to a different chemical structure, in our patient positive patch test results confirmed cross-reactivity between both drugs.²

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