

Bullous fixed drug eruption induced by etoricoxib, confirmed by patch testing, with tolerance to celecoxib

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Fixed drug eruption (FDE) is a cutaneous adverse drug reaction characterized by erythematous or bullous lesions that heal with hyperpigmentation and typically recur in the same location following drug intake. Non-steroidal anti-inflammatory drugs (NSAIDs) are the most frequent causes of FDE, followed by antibiotics and anticonvulsants.¹

CASE REPORT

A 54-year-old caucasian female with a history of three blistering outbreaks within the last 4 months presented with a 2-day history of tense, clear bullae located in the oral mucosa and perioral area, associated with reactivation of previously existing violaceous patches (Figure 1). She reported having taken etoricoxib the day before for the relief of joint pain. Histopathology showed a superficial interstitial and perivascular infiltrate within the dermis, composed of lymphocytes and eosinophils, with extensive epidermal necrosis and bulla formation, consistent with a diagnosis of FDE.



FIGURE 1 Tense, clear bullae located in the oral mucosa and perioral area, and reactivation of previously existing violaceous patches in the arm pit

Patch testing with IQ Ultra chambers was performed with the Portuguese Contact Dermatitis Research Group baseline series (Chemotechnique Diagnostics, Vellinge, Sweden) and with etoricoxib and celecoxib. These two substances were obtained by preparation of the powder of commercial pills (Exxiv and Celebrix) 10% pet. Both were applied on lesional and non-lesional skin under occlusion for 2 days. Readings were performed on day 3 according to European Society of Contact Dermatitis guidelines, and showed a positive reaction to etoricoxib 10% pet. only on lesional skin, confirming etoricoxib as the culprit drug (Figure 2).



FIGURE 2 Patch test readings showed positivity only in lesional skin for etoricoxib (Exxiv 10% pet.), confirming the causative role of etoricoxib as the culprit drug. There was an absence of reactivity for celecoxib (Celebrix 10% pet.) in lesional and non-lesional skin

DISCUSSION

Typical lesions, histopathology and patch testing confirmed the diagnosis of FDE induced by etoricoxib. Patch tests constitute a safe alternative for attempting to identify the culprit drug, and they should be performed within some weeks after the acute event, to avoid the refractory period.² They allow diagnostic confirmation in ~40% of cases; however, a lack of reactivity of some allergens is a limitation on the diagnostic value of patch tests in cases of FDE.³ Intraepidermal CD8⁺ memory T cells are mostly located in the epidermis of hyperpigmented patches, explaining the reactivation in these areas after oral drug re-exposure, and patch testing being exclusively positive in lesional skin.² Etoricoxib is a cyclo-oxygenase 2-selective inhibitor, and is rarely described as the responsible drug in FDE. In cases of etoricoxib-induced FDE, it is usually safe to use another coxib with a different chemical structure, although cross-reactivity is possible.⁴⁻⁶

CONFLICTS OF INTEREST

The authors have no conflicts of interest to report.

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