

Fixed Drug Eruption to Rofecoxib

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Rofecoxib, used for dysmenorrhea, caused a herpetiform fixed drug eruption predominantly involving the lips with classic clinical and histological findings in a red-brown lesion on the dorsal hand.

Case Report

A 38-year-old white woman presented with a 6-week history of an intermittent eruption on the lower lip, right nares, and right dorsal hand. These erythematous plaques always occurred in the same locations and was preceded by paresthesias. She had a history of cold sores.

Famciclovir and cephalixin were prescribed. Results of cultures for bacteria and herpes simplex virus were later reported negative. The patient continued to have intermittent similar eruptions over the subsequent 3 months despite daily prophylactic usage of famciclovir. She reported that the outbreaks coincided with her menstrual cycle.

On examination 3 months after her initial presentation, the patient had vesicles on her upper lips and a 1-cm red plaque on her right dorsal hand (Figure 1). She stated that this lesion appeared brown between inflammatory episodes. Results of a biopsy of the lesion, obtained 36 hours after the patient took one dose of rofecoxib (Vioxx[®]), revealed numerous apoptotic keratinocytes throughout the epidermis consistent with fixed drug eruption (Figure 2).

The patient reported taking rofecoxib for dysmenorrhea before each of her cutaneous flares. She had originally taken it on a daily basis for postoperative pain 14 months prior to the onset of her eruption and had taken it only perimenstrually for 12 months before the fixed drug eruption appeared. Her daily medications were bupropion (Wellbutrin[®]) and famotidine (Pepcid[®]). In the past, she had taken hyoscyamine (Levbid[®]), phenobarbital, atropine, and scopolamine (Donnatol[®]) but denied use of these during the previous 3 months. She denied use of any other perimenstrual medications in the preceding several months. She had toler-



Figure 1. Vesicles near the lip (A) and red macule on dorsal hand (B).

ated use of ibuprofen in the past without any rash; she had never taken naproxen.

The patient was asked to take rofecoxib as a rechallenge. While taking only bupropion, she took one dose of rofecoxib and experienced a flare of the lesions on her lip and hand later the same day. She has had no further flares after substituting ibuprofen for treatment of dysmenorrhea.

Comment

Fixed drug eruption is a frequent cutaneous reaction to nonsteroidal anti-inflammatory drugs, second only in occurrence to urticaria.¹ Fixed drug eruptions appear to be more common in this class as a whole compared with all systemic medications classed together where exanthemas are more common

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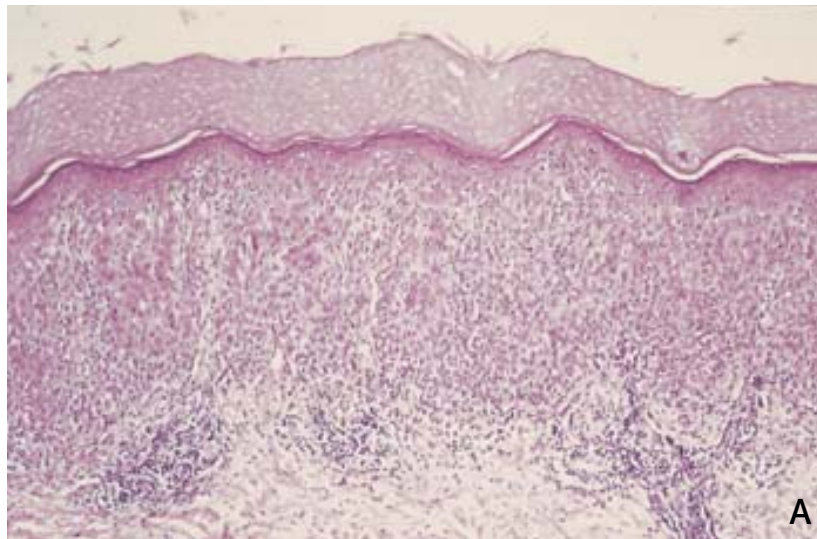
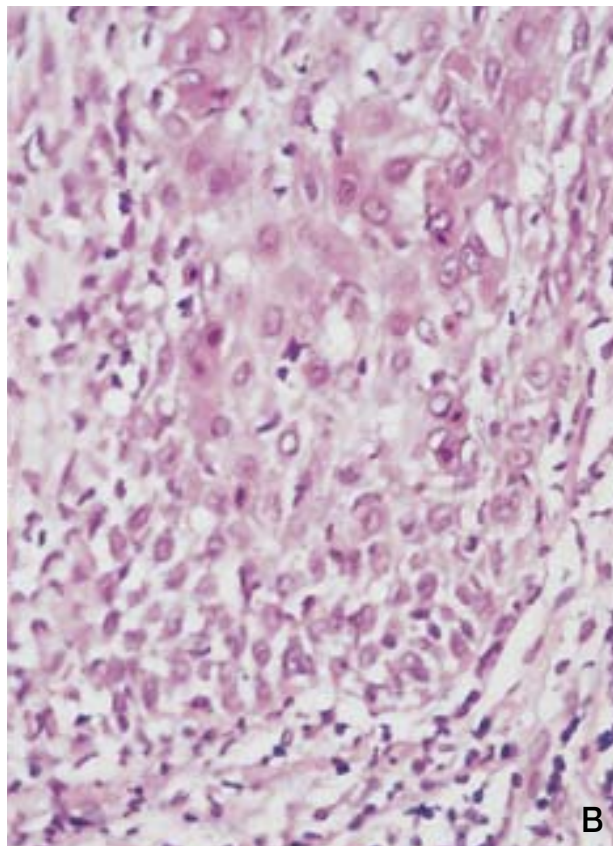


Figure 2. Biopsy of the hand lesion with a prominent interface dermatitis (A), numerous apoptotic keratinocytes, and prominent intraepidermal infiltrates of inflammatory cells (B) in a routine stained paraffin section of skin (H&E, original magnifications $\times 10$ and $\times 40$).



than fixed drug eruption.¹ Fixed drug eruption may be familial and may be linked to HLA-B22.² Fixed drug eruption to other medications taken perimenstrually has previously been reported^{3,4} and may easily be confused with herpes simplex. This is because herpes simplex also frequently causes recurrent vesicles on mucosal surfaces and may flare with menstruation.³ Patients often are unaware of the link between their medication usage and the rash.⁴

Fixed drug eruption is best diagnosed by oral challenge with the medication. Patch testing on affected areas of skin has been used to document some cases,⁵ but was inconclusive in a previous report of fixed drug eruption to naproxen.⁶ To our knowledge, based on a Medline search conducted in March 2001, this is the first reported case of fixed drug eruption to rofecoxib.

Rofecoxib is a selective cyclooxygenase-2 inhibitor that was introduced as an alternative to nonselective cyclooxygenase inhibitors that have a higher incidence of gastrointestinal ulceration.⁷ Unlike celecoxib, another selective cyclooxygenase-2 inhibitor recently introduced, rofecoxib does not cause reactions in patients allergic to sulfonamides.⁷ Our patient was able to tolerate ibuprofen without evidence of cross reaction, suggesting that this may be an alternative for patients with fixed drug reaction to rofecoxib.

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