Fixed Drug Eruption Due to Piroxicam

B. Fernández-Jorge, J. J. Goday, M. Almagro, and E. Fonseca
Servicio de Dermatología, Hospital Juan Canalejo, La Coruña, Spain

To the Editor:

Piroxicam is a nonsteroidal anti-inflammatory drug (NSAID) of the oxicam group and has anti-inflammatory, analgesic, antipyretic, and antiplatelet properties. It is a potent prostaglandin inhibitor with a long half-life in plasma (36-58 hours), meaning that it can be administered in a single daily dose. Multiple adverse systemic effects have been reported for piroxicam, of which the most common are gastrointestinal, though there may also be effects on the nervous system, liver, urinary tract, heart, blood, and skin. Several cutaneous adverse effects are mentioned in the literature and include photosensitivity, erythema multiforme, pemphigus vulgaris, linear immunoglobulin A dermatosis, lichenoid eruptions, Stevens-Johnson syndrome, toxic epidermal necrolysis, exfoliative dermatitis, pruritus, erythema annulare centrifugum, and fixed drug eruption (FDE). We present a case of FDE due to piroxicam—a rare cause of this condition—confirmed by patch tests.

A 26-year-old man visited our department due to the appearance of multiple erythematous, edematous plaques, some of them with a central blister of between 2 cm and 5 cm in diameter, on the dorsum of the tongue (Figure 1), on the glans, and on both arms (Figure 2). The plaques were accompanied by stinging and itching sensations. This was the third episode the patient had suffered in the previous 3 months; the earlier episodes had remitted without medication. The patient occasionally took acetylsalicylic acid (Aspirin) and piroxicam (Feldene Flash) for muscle pain. Withdrawal of both drugs was recommended due to a suspected FDE, and a short course of systemic corticosteroids was initiated. The lesions disappeared within a few days, leaving residual hyperpigmentation. Patch tests were carried out on normal skin using the standard series recommended by the Spanish Contact Dermatitis Research Group (GEIDC) and the Arístegui NSAID series (Arístegui, Bilbao, Spain); results were negative after 48 and 96 hours. Patches of 1% piroxicam in petrolatum were also applied to the sites of previous FDE lesions and positive results (++) were obtained at 48 and 96 hours (Figure 3). The patient refused to undergo further patch tests to study possible cross-reactivity with other drugs of the oxicam group.

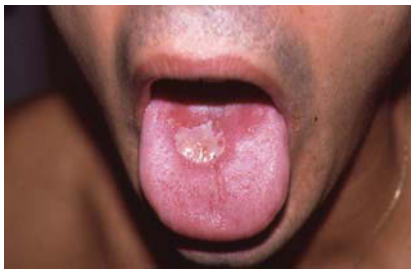

Figure 1. Erythematous, edematous plaques on the dorsum of the tongue.

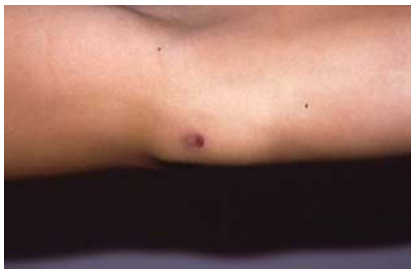

Figure 2. Erythematous, edematous plaques on the arm.

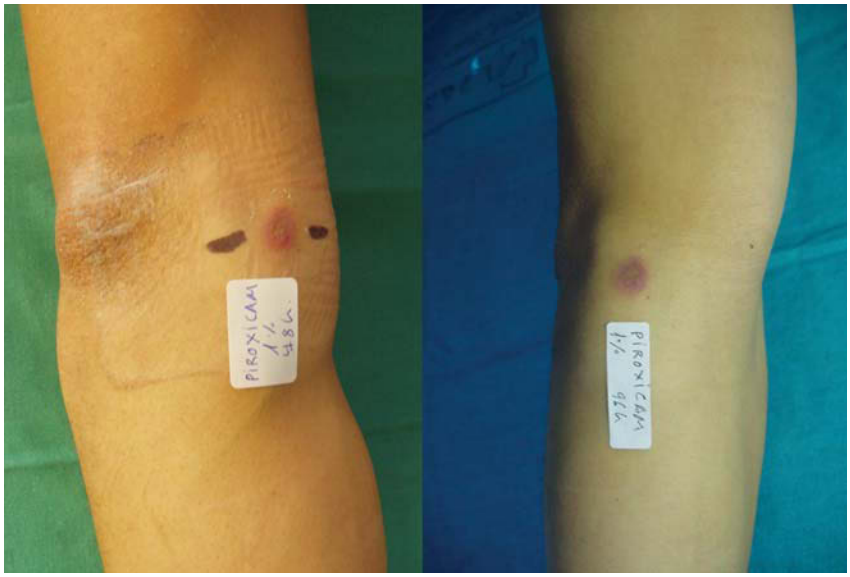

Figure 3. Patches of 1% piroxicam in petrolatum on the sites of previous fixed drug eruption lesions. Positive results were obtained at 48 and 96 hours.

FDE is a skin eruption characterized by 1 or more clearly defined erythematous lesions that begin shortly after the causal agent has been ingested, and usually recur at the same site when the agent is reintroduced. NSAIDs, phenazone, barbiturates, tetracycline, and sulfonamides are the most common causal agents. Although piroxicam is a common cause of several forms of dermatitis, it is rarely implicated in triggering FDE and, to date, only 11 cases have been reported,[1-9] only 2 of which affected the mucosa.[7,8] Our

patient tested positive for the patch placed over the site of a previous FDE lesion, whereas the patch placed over normal skin was negative. This finding supports the idea that placing patches on residual lesions is useful in some cases of FDE and avoids the need for oral challenge, which can entail risks. Findings by other authors support the use of patch tests on FDE lesions caused by piroxicam.[2-5,7,9] Cross-reactivity has been reported between piroxicam and other drugs of the oxicam group, such as tenoxicam and droxicam,[4,5] as occurs in photodermatitis caused by piroxicam.[10] Our patient refused to test other drugs of the oxicam group to study possible cross-reactivity but, based on previously published studies, it seems reasonable to recommend avoiding NSAIDs of the entire drug group when one of them is responsible for this disease.

In summary, we present the third case, in our experience, of FDE due to piroxicam, with involvement of the skin and mucosa. Although piroxicam is a rare cause of FDE, we have seen 3 other cases in our department in the past 3 years; 2 of these cases have been published.[9] It may be that piroxicam is not an exceptional cause of FDE but, rather, that it has not been adequately studied, due to the fact that the main consumers of the drug are rheumatology patients, who take multiple drugs. Furthermore, we emphasize the value of patch tests on affected skin in FDE caused by piroxicam—a procedure that is also supported by other published reports.[2-5,7,9]

References

1. Valsecchi R, Cainelli T. Nonpigmenting fixed drug reaction to piroxicam. J Am Acad Dermatol. 1998;21:1300.
2. Stubb S, Reitamo S. Fixed drug eruption caused by piroxicam. J Am Acad Dermatol. 1990;6:1111-2.
3. De la Hoz B, Soria C, Fraj J, Losada E, Ledo A. Fixed drug eruption due to piroxicam. Int J Dermatol. 1990;29: 672-3.
4. Gastaminza G, Echechipía S, Navarro JA, Fernández de Corrés L. Fixed drug eruption from piroxicam. Contact Dermatitis. 1993;28:43-4.
5. Ordoqui E, De Barrio M, Rodríguez VM, Herrero T, Gil PJ, Baeza ML. Cross-sensitivity among oxicams in piroxicam-caused fixed drug eruption: two case reports. Allergy. 1995;50: 741-4.
6. Vasconcelos C, Magina S, Quirino P, Barros MA, Mesquita-Guimaraes J. Cutaneous drug reactions to piroxicam. Contact Dermatitis. 1997:39: 145.
7. Tanaka S. Fixed drug eruption from piroxicam with positive lesional patch test. Contact Dermatitis. 2002;46:174.
8. Montoro J, Díaz M, Genis C, Lozano A, Bertomeu F. Non-pigmenting cutaneous-mucosal fixed drug eruption due to piroxicam. Allergol Inmunopathol (Madr). 2003;31:53-5.
9. Cuerda Galindo E, Goday-Buján JJ, García-Silva J, Martínez W, Verea Hernando M, Fonseca E. Fixed drug eruption from piroxicam. JEADV. 2004;18:586-7.
10. Trujillo MJ, de Barrio M, Rodríguez A, Moreno-Zazo M, Sánchez I, Pelta R, et al. Piroxicam-induced photodermatitis. Cross-reactivity among oxicams. A case report. Allergol Immunopathol (Madr). 2001;29:133-6.