Non-pigmenting cutaneous-mucosal fixed drug eruption due to piroxicam

J. Montoro, M. Díaz, C. Genís, A. Lozano and F. Bertomeu

Allergy Unit. Internal Medicine Department. *Rheumatology Unit. Internal Medicine Department. **Chief of Internal Medicine Department. Hospital La Plana. Villarreal (Castellón). Spain.

ABSTRACT

Background: Piroxicam is a widely used anti-inflammatory drug. Most adverse reactions affect gastrointestinal system, liver and skin. Fixed drug eruption although very unusual, has also been described, but with cutaneous involvement exclusively.

We present the case of a 49-year-old man who suffered three episodes of fixed drug eruption with cutaneous-mucosal involvement, even simulating an autoimmune disease, whenever he was treated with oral piroxicam.

Methods and results: He was patch tested on normal skin with the GEIDC standard series and an NSAIDs series. He was patch tested on normal skin and on fixed eruption with piroxicam, meloxicam and tenoxicam (all of them 1 % pet). Oral challenge test was not performed due to the severity and reproducibility in previous reactions.

Results showed a positive patch test to piroxicam (1 % pet) on fixed eruption, with negative results to the rest.

Conclusions: Adverse drug reactions may present a wide variability of clinical symptoms. In these situations an accurate clinical history is necessary. To our knowledge this is the 1st report of non-pigmenting fixed drug eruption with cutaneous-mucosal involvement due to piroxicam. Cross-reactivity between oxicams could not be demonstrated by patch test on fixed eruption.

Key words: Piroxicam. Non-pigmenting fixed eruption. Non-steroidal anti-inflammatory drugs. Drug allergy.

RESUMEN

Introducción: El piroxicam es un fármaco antiinflamatorio ampliamente utilizado. La mayor parte de las reacciones adversas producidas por él afectan al aparato digestivo, al hígado y a la piel. La erupción fija medicamentosa, con una frecuencia de aparición muy escasa, también se ha descrito, aunque con afectación exclusivamente cutánea.

Presentamos el caso de un varón de 49 años que tuvo tres episodios de erupción fija con afectación cutáneo-mucosa, simulando una enfermedad autoinmune, coincidiendo con la administración oral de piroxicam.

Material y método: Se realizaron pruebas epicutáneas con la batería estándar del GEIDC y una batería de AINE sobre piel sana. Sobre la erupción fija y también sobre piel sana se aplicaron parches con piroxicam, tenoxicam y meloxicam (todos ellos al 1 % vaselina). No se realizó prueba de exposición oral a causa de la gravedad y reproducibilidad de las reacciones previas.

Los resultados fueron positivos, de forma exclusiva, con el parche de piroxicam (1 % vaselina) sobre la erupción fija.

Conclusiones: Las reacciones adversas medicamentosas pueden presentar una amplia variabilidad en sus manifestaciones clínicas. En estas situaciones...
es necesario realizar una anamnesis muy minuciosa. De acuerdo con la bibliografía existente, este es el primer caso descrito de erupción fija no pigmentaria por piroxicam con afectación cutáneo-mucosa. La reactividad cruzada entre oxicams no pudo demostrarse mediante la aplicación del patch test sobre la erupción fija.

**Palabras clave:** Piroxicam. Erupción fija no pigmentaria. Antiinflamatorios no esteroideos. AINE. Alergia a medicamentos.

**INTRODUCTION**

Piroxicam is a widely used anti-inflammatory drug. Most adverse reactions affect gastrointestinal system, liver and skin. Fixed drug eruption, although unusual, has also been described\(^1\)-\(^3\), but only with cutaneous involvement.

**CASE REPORT**

An 49-year-old man, with no previous history of allergy, complained of cutaneous-mucosal lesions appeared during a treatment with oral piroxicam. Two and half years ago he was taking oral piroxicam (Feldene capsules\(^\circledR\), Pfizer S.A., Madrid, Spain) 1 x day, for left knee meniscopathy. At D2 (day 2) pruritus, exanthema and vesicular lesions at glans appeared. He stopped oral piroxicam and the lesions disappeared. 6 months later he was taking oral piroxicam, 1 x day, (Feldene Flas\(^\circledR\), Pfizer S.A., Madrid, Spain) for a relapse on his meniscopathy, during 7 days, despite of the beginning of the lesions at glans at D2 of treatment. At D7 he was admitted to the hospital with a suspicion of Behçet Still. Numerous mucosal ulcers at glans and mouth, and at the skin of the groins and intergluteal sulcus were present. All immunological studies performed to diagnose Behçet Still resulted negatives and the patient was discharged after treatment with oral corticosteroids and colchicine. Four months later the patient was treated again with oral piroxicam, 1 x day, (Sasulen capsules\(^\circledR\), FAES Lab., Madrid, Spain) for muscle spasm in his left scapula. At D3, he developed mucosal ulcers at glans and mouth. Piroxicam was withdrawn and treatment with oral corticosteroids was started. At present the patient has no residual lesion, nor pigmenting at the areas of fixed eruption. After the last reaction oral diclofenac has been well tolerated.

**MATERIAL AND METHODS**

He was patch tested on normal skin with the GEIDC standar series, an NSAIDs series (salicylic acid 1 %, bufexamac 5 %, naproxen 5 %, ibuprofen 5 %, phenylbutazone 1 %, diclofenac 1 %, paracetamol 5 %, indometacine 5 % and ketoprofen 2,5 %, all in pet. Lab. Bial-Aristegui, Bilbao, Spain), and with piroxicam, meloxicam and tenoxicam (all 1 % pet). He was also patch tested on intergluteal sulcus with piroxicam, meloxicam and tenoxicam.

Oral challenge test was not performed due to the severity and reproducibility in previous reactions.

**RESULTS**

Results are shown on table I.

**DISCUSSION**

Taking into account all the features of this clinical case, we consider necessary to emphasize the importance to perform an exact diagnosis of adverse drug reaction (ADR) as soon as possible with an accurate clinical history. Sometimes is not an easy work, because of the variability of clinical symptoms (even simulating an autoimmune disease in this case) of the ADR. It’s important to point up the diagnosis validity of patch test on fixed eruption area.

To our knowledge, this is the 1st report of non-pigmenting fixed drug eruption with cutaneous-mucosal involvement due to piroxicam. Cross-reactivity between oxicams could not be demonstrated by patch test on fixed eruption.

**Table I**

Results of patch test on normal skin and on fixed eruption area

<table>
<thead>
<tr>
<th></th>
<th>% and vehicle</th>
<th>normal skin</th>
<th>normal skin</th>
<th>fixed eruption</th>
<th>fixed eruption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D2</td>
<td>D4</td>
<td>D2</td>
<td>D4</td>
<td></td>
</tr>
<tr>
<td>GEIDC standard series</td>
<td>–</td>
<td>–</td>
<td>NT</td>
<td>NT</td>
<td></td>
</tr>
<tr>
<td>NSAIDs series</td>
<td>–</td>
<td>–</td>
<td>NT</td>
<td>NT</td>
<td></td>
</tr>
<tr>
<td>Piroxicam</td>
<td>1 % pet.</td>
<td>–</td>
<td>–</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Tenoxicam</td>
<td>1 % pet.</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Meloxicam</td>
<td>1 % pet.</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

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REFERENCES

