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Mucosal lichenoid drug reaction associated with glimepiride: a case report

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Abstract. – We report the case of a 52-year-old man with type 2 diabetes, who developed severe mucosal erosions of the tongue, glans penis and perianal area, induced by glimepiride. A tissue biopsy was performed and revealed the characteristics of lichen planus (LP). The improvement of the patient's condition after withdrawal of glimepiride added to recurrence of the lesions when medication was reintroduced confirmed that the second generation anti-diabetic was the causative agent. To the best of our knowledge, this has not been reported previously.

Key Words:
Glimepiride, Mucosal, Lichenoid drug reaction.

Introduction

The reports of mucosal lichenoid drug reactions (LDR) are considerably fewer than those of cutaneous eruptions and few drugs have been reported as causing oral LDR such as chlorpropamide1, glibenclamide[2], sulfamethoxazole[3], ofloxacin[2], captopril[4], lithium[5] or genital LDR such as propranolol[6]. Glimepiride has been implicated in the genesis of cutaneous lichenoid eruption in one case[7]], but no cases of mucosal involvement have been described with this drug. We report the first case of oral and anogenital LDR due to glimepiride.

Case Report

A 52-year-old man suffered from type II diabetes mellitus by two years. He was treated by metformin 1500 mg daily. In October 2011; glimepiride 1 mg per day had been added to improve his diabetic control.

On 1 November 2012, the patient experienced pain and a burning sensation when eating spicy food with erythematous and ulcerated areas of the left edge of his tongue. There was no past history of dermatological disorders, specifically LP. Careful examination failed to show any lesions elsewhere on the skin. By 4 November, ulceration had occurred in the anal mucosa and in the glans penis. For these reasons, the patient reported functional impairment associated with burning, pain, dyspareunia and dysuria.

An incisional biopsy of the tongue mucosa was taken and histopathology showed areas of degeneration of the basal membrane and presence of inflammatory infiltrate predominantly lymphocytic in the juxta-epithelial region. The histopathological diagnosis was compatible with oral LP. Therefore, metformin and glimepiride were stopped and replaced with insulin. The patient was treated with general corticosteroids.The lesions improved and the burning sensation disappeared two weeks after treatment.

On 22 December, metformin was re-administered. No recurrence was observed during the follow-up. In January 2013; the patient refused insulin injection and restarted glimepiride on his own accord. Two days after glimepiride ingestion, the tongue lesions recurred, but once more they soon cleared when the tablets were withdrawn and replaced by insulin.

Discussion

An investigation conducted at the Sfax centre of pharmacovigilance using the French imputation method[8] led researchers to strongly suspect the responsibility of glimepiride in the genesis of mucosal LDR. The score of imputability is considered as very likely C3S2I3B2.

Oral LDRs are clinically and histopathologically similar to the idiopathic oral LP lesions, making their differential diagnosis difficult[9].

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Sites of predilection are similar to oral LP. Unlike oral LP, however, oral LDR lesions tend to be unilateral[5], as in the above reported case. The glans penis and anus are rare sites of erosive idiopathic LP[10].

In accordance with similar studies, the interval between initial medication use and development of oral LDR is highly variable, ranging from weeks to months, with an average of 2-3 months. Delay of onset of greater than 1 year has been reported[11] coinciding with the period observed in the present case. The rapid clearing of the eruption is also quite unlike the slow resolution of the mucosal lesions of LP. Diagnosis is based on the medical history of the patients, on the characteristic histopathological finding, complemented by the observation of improvement of the condition after withdrawal of the medication and recurrence of the lesions when the medication is reintroduced.

Although skin LDR has been described with glimepiride in one case[7], there are no reports in the literature of mucosal LDR influenced by this medication. This case is probably the first report of mucosal LDR resulting from glimepiride therapy.

Conclusions

We reported an unusual case of erosive oral LDR with anogenital lesions triggered by glimepiride. Clinician should be aware facing this rare and serious side effect. Withdrawal of the drug was fundamental to improvement of the disease.

Conflict of Interest

The Authors declare that there are no conflicts of interest.

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