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VIGNETTE IN CONTACT DERMATOLOGY

Allergic contact dermatitis from ciclopirox olamine

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SUMMARY

A 50-year-old man with interdigital tinea pedis developed an allergic dermatitis spreading from the toes to the lower shins. Patch tests were strongly positive to ciclopirox olamine 1% pet. Sensitization to this topical antifungal agent has rarely been reported in the literature.

Key words: antifungal, cyclopyroxolamine, eczema, medicaments, side-effects.

CASE REPORT

A 50-year-old man presented with a 2-month history of interdigital mycosis of the right foot. Treatment included topical antifungal creams and in particular terbinafine, econazole, and ciclopirox olamine (cyclopyroxolamine). Four weeks of treatment with ciclopirox olamine (Micoxolamina® cream) led, after an initial improvement, to a dermatitis spreading from the toes to the lower shins. Secondary infection of the interdigital areas with *Pseudomonas aeruginosa* was also present. Discontinuation of ciclopirox olamine and treatment with topical methylprednisolone, systemic amoxicillin and fluconazole led to resolution of the dermatitis in 1 month.

Patch testing with the European standard series and to the topical antifungals terbinafine, econazole, ciclopirox olamine, including Micoxolamina® cream and its constituents, revealed positive reactions to Micoxolamina® cream as is and ciclopirox olamine 1% pet. Patch tests with ciclopirox olamine 1% pet. in 10 healthy control volunteers gave negative results.

DISCUSSION

Allergic contact dermatitis due to antifungal agents is well known.[1] Among them, imidazole derivatives are the antifungal agents most frequently reported as a cause of contact dermatitis.

The hydroxypyridones represent a class of antifungal agents which includes ciclopirox olamine and rylopyrox olamine that are substituted pyridone antifungals not related to other antifungal agents. Ciclopirox olamine has a rapid onset of action and is active against a broad spectrum of fungi, including dermatophytes, yeasts and moulds, in *in vitro* and *in vivo* models. Ciclopirox olamine inhibits the intracellular absorption of ions and substrates necessary for fungal nutrition. It also shows anti-inflammatory effects,[2] and is effective in the treatment of seborrhoeic dermatitis.[3] It is also used as a lacquer for onychomycoses. Ciclopirox olamine is well tolerated; local or systemic side-effects have been rarely reported.

Although this agent has been used for many years, contact allergy has been rarely reported.[4,5] For this reason, it is considered to be a weak sensitizer. However, the lack of reports of contact dermatitis may also be attributable to a limited worldwide distribution. It is not currently available in Australia although it has been used for many years in New Zealand, Italy and Germany. In patients with allergic contact dermatitis to ciclopirox olamine, imidazoles may be a safe alternative because of the lack of cross-reactivity between the two classes of drugs.[6]

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