LETTER TO THE EDITOR

Case Report. An unusual case of cutaneous sporotrichosis and its response to weekly fluconazole

Fallbericht. Ein ungewöhnlicher Kutaner Sporotrichose-Fall unter Fluconazol-Therapie


Key words. Sporotrichosis, cutaneous infection, antimycotic chemotherapy, fluconazole.

Summary. Cutaneous sporotrichosis is clinically divided into two main types: lymphocutaneous and fixed plaque type. Our report represents an unusual case with both types simultaneously. Fluconazole 150 mg once weekly was used as the treatment. The fixed type lesions responded very well and were healed after 4 months, but the lymphocutaneous lesions were not controlled even after 6 months of the treatment.


Introduction

Sporotrichosis is one of the commonest subcutaneous mycoses [1]. It is a chronic lymphocutaneous infection that follows accidental implantation of the fungus *Sporothrix schenckii* into the skin. Sporotrichosis occurs worldwide but is more frequent in subtropical and tropical regions. The two commonest types of sporotrichosis are the lymphocutaneous type and the fixed cutaneous type. We report the case of a woman with both of these types of sporotrichosis simultaneously.

Case report

A 65-year-old woman presented with multiple ulcers on the face and the forearm. At the time of admission two lesions were present on the right eyebrow and one on the right proximal forearm (3 cm below the antecubital fossa).

The facial lesions initially occurred 6 years ago as erythematous pruritic papules which rapidly became pustular and left persistent 1 × 1.5 cm heavily crusted ulcers (Fig. 1). The limb lesion also began 6 years ago as a subcutaneous nodule, which later became variable in form and eventually ulcerated. A 3 cm × 3.5 cm tender ulcer was present on clinical examination (Fig. 1). The lesion had an erythematous sharp border and seropurulent discharge and was covered with a thick crust. There was no previous history of trauma or occupational contact with plants and soil.

The smear of the lesions for leishmaniasis was negative. The smear and culture of the exudate were negative for acid-fast bacilli. A biopsy was taken and used for culture and histologic examination. Haematoxylin and eosin-stained sections showed pseudo-epitheliomatous hyperplasia in the...
epidermis and granulomatous reaction in the dermis. The granulomas contained histiocytes, Langhans giant cells, lymphocytes and many polymorphonuclear granulocytes with occasional abscess formation. PAS staining was negative for fungi. The culture and polymerase chain reaction for mycobacteria were negative but the culture for fungus revealed *Sporothrix schenckii*.

Fluconazole treatment, 150 mg once weekly, was started. No side-effects were noted. At the beginning of the treatment one 0.5 cm \times 0.5 cm lymph node was present in the right arm (proximal to the forearm lesion). During the treatment it enlarged, became fluctuated and eventually discharged a purulent material and left a 2 cm \times 2.5 cm ulcer. From the beginning of the treatment, the eyebrow lesions started to improve and after 4 months the healing was complete and only two somewhat atrophic scars remained (Fig. 2). However, even after 6 months the limb lesions showed only little improvement.

**Discussion**

Sporotrichosis is world-wide in distribution but the greatest number of cases occur in Mexico, central America, Colombia and Brazil [1]. It occurs in both tropical and temperate regions but is rare in semi-arid areas such as Iran. Even in the humid and rainy zone of northern Iran, *S. schenckii* is rare in soil and plants [2].

Cutaneous sporotrichosis (CS) is clinically divided into two main types: lympho-cutaneous, which occurs in more than 75% of cases and fixed or plaque type. There are only a few reports of CS from Iran and most of those were of the fixed type [3].

It is unknown why the clinical behaviour of the two principal types of CS is different [4]. First this may be related to the immune response of the host. Disseminated CS is observed in immunocompromised patients. Secondly, temperature sensitivity of different strains of the organism may be responsible. Interestingly, our case had both types of CS simultaneously: the eyebrow lesions were of the fixed type and the lesions on the extremity were of the lympho-cutaneous type.

We used fluconazole 150 mg once weekly as the treatment for CS. A saturated solution of potassium iodide is the first treatment with its own side-effects. In the second line itraconazole and saperconazole have had good results with low side-effects [5]. Recently fluconazole has been used in different regimens [1, 6, 7]. It has been effective in many reports, but it appears more effective in the fixed cutaneous type [1]. In our patient the fixed type lesions responded very well and were healed after 4 months but the lympho-cutaneous lesions were not controlled even after 6 months of weekly fluconazole.

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**References**
