

CUTANEOUS LYMPHANGITIC SPOROTRICHOSIS TREATED WITH TERBINAFINE

C. Veller Fornasa, V. Carrozzo, I. Forte and A. Peserico

SUMMARY

We described a patient with cutaneous lymphangitic sporotrichosis treated with terbinafine in doses of 250 mg twice daily. Culture examinations were negative after 3 months of treatment which was suspended 6 months later when the lesions had disappeared. No side effects were observed.

KEY WORDS

sporotrichosis cutaneous lymphangitic, terbinafine

INTRODUCTION

Sporotrichosis is a fungal infection of the skin caused by *Sporotrix schenckii*. Three clinical forms have been described: localized, lymphangitic and disseminated (1,2). Antifungal drugs are used to treat sporotrichosis, including potassium iodide, ketoconazole, itraconazole, and amphotericin B (1,3). Recently it has been reported that terbinafine, a fungistatic agent, may be effective (4,5), and we describe a case of lymphangitic sporotrichosis treated with this drug.

CASE REPORT

A 70-year-old woman had a 3-month history of nodular lesions on the flexor surface of the right forearm. The first lesion was followed by subsequent ones along lymphatic channels up to the fold of the

elbow. Clinical examination (Fig. 1) revealed raised, round, erythematous, indolent nodules, of 2-3 cm in diameter, with ulcerated and scabby center and periphery of verrucous aspect; pressure on the lesions caused discharge of yellowish purulent material. No regional lymphadenopathy was detected, and the patient's general condition was good. She underwent radiography of the arm and chest, TPHA and PPD tests, skin biopsy and culture of the lesions.

Histology (Fig. 2) revealed mild epidermal acanthosis, dermal edema, and granulomatous infiltrate with histiocytes, lymphocytes, neutrophils, plasma cells, and giant Langhans' cells. Also eosinophils were present. PAS staining was negative for fungi. Culture on Sabouraud's agar-dextrose medium demonstrated the presence of *Sporotrix schenckii*.

The patient was treated with terbinafine 250 mg twice daily until mycologic and clinical cure was



Fig. 1. Sporotrichosis, the localized lymphatic variety. Round, erythematous, indolent nodules with ulcerated and scabby center on the forearm.

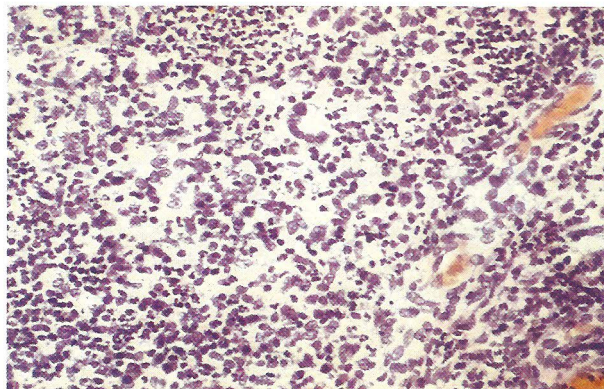


Fig. 2. Sporotrichosis; histopathology. Edema and a granulomatous infiltrate with histiocytes, lymphocytes, neutrophils, plasma cells and giant Langhans cells in the dermis. There are also some eosinophils.

obtained. Clinical and laboratory investigations including blood counts and chemistries were performed before, during and after the treatment to evaluate the possible toxicity of the drug. The values observed remained in the normal range for the duration of the treatment and after its withdrawal.

There was no longer a purulent exudate after 4 weeks of treatment with terbinafine. *Sporotrix schenckii* was isolated from cultures of superficial crusts during the first 3 months of treatment. Subsequent cultures were negative. However the treatment was continued for 24 more weeks until clinical cure was achieved.

DISCUSSION

This experience confirms reports in the literature (4,5) that terbinafine is efficacious in the treatment

of lymphangitic sporotrichosis.

Potassium iodide, itraconazole, ketoconazole and amphotericin B are used in the treatment of cutaneous sporotrichosis (2,3,6,7,9,11,12) but occasional side effects may lead to their suspension (1,8,10,12).

In our patient terbinafine administration was continued for 36 weeks, the longest period of treatment reported by Hull and Vismer (5) on their five cases of sporotrichosis.

The mean duration of the treatment in their other four cases was 13 weeks.

The treatment was well tolerated by our patient and no side effects were observed in the 9 months of treatment.

REFERENCES

1. Roberts SOB, Mackenzie DWR: Sporotrichosis. "In:" Rook A, Wilkinson DS, Ebling FJG, Champion RH, Burton JL eds. *Textbook of Dermatology*, 4th ed., Oxford: Blackwell Scientific Publication, 1986; Vol. II, pp. 975-978.
2. Finlayson GR et al. Sporotrichosis treated with Amphotericin B. *Arch Dermatol* 1964; 89: 730-733.
3. Kenneth J, Tomecki et al. Subcutaneous mycoses. *J Am Acad Dermatol* 1989; 21: 785-790.
4. Clayton YM. In vitro activity of terbinafine. *Clin Exper Dermatol* 1989; 14: 101-103.
5. Hull PR and Vismer HF. Treatment of cutaneous sporotrichosis with terbinafine. *Br J Dermatol* 1992; 126: 51-55, suppl. 39.
6. Itok M, Okamoto S, Kariya H. Survey of 2000 cases of sporotrichosis. *Dermatologica* 1986; 172:209-213
7. Leonard C, Sperling MC. Feline sporotrichosis transmission to man. *Arch Dermatol* 1982; 118: 429-431.
8. Smith PW, Loomis GW et al. Disseminated cutaneous sporotrichosis, *Arch Dermatol* 1981; 117: 143-144.
9. Samorodin CS, Sina B. Ketoconazole-treated sporotrichosis in a veterinarian. *Cutis* 1984; 22: 487-488.
10. Martins JEC, de Mendonca PR et al. Tratamento da esporotricose del pelo con ketoconazol. *Rev Hosp Clin Fac Med S Paulo* 1982; 37: 92.
11. Reshad H, Pegus JS et al. Cutaneous lymphatic sporotrichosis treated with ketoconazole. Report of an infection acquired in the United Kingdom. *Clin Exp Dermatol* 1984; 9: 599-603.
12. Restrepo A, Roplebo J et al. Itraconazole therapy in lymphangitic and cutaneous sporotrichosis. *Arch Dermatol* 1986; 122: 413-417.

AUTHORS' ADDRESSES

Cleto Veller Fornasa, MD, PhD, Professor of dermatology,
Clinica Dermosifilopatica, Via Cesare Battisti 206, 35100 Padova, Italy