

CASE REPORTS

PRIMARY CUTANEOUS PHAEOHYPHOMYCOSIS

VK Somani, Fatima Razvi, V K Sharma, V N V L Sita, V Sucharita

A rare case of phaeohyphomycosis presenting with a solitary nodule on right lower leg of 2 years duration is being reported. The disease showed marked response to oral fluconazole.

Key Words : Phaeohyphomycosis, *Curvularia lunata*, Fluconazole

Introduction

Phaeohyphomycosis is an infectious disease caused by dematiaceous fungi. The causative organisms include *Alternaria*, *Curvularia*, *Exophiala*, *Phialophora* spp etc. The pathogen probably is introduced by implantation from an exogenous source as injury is a common cause. Various types described are superficial, cutaneous, subcutaneous and systemic. Subcutaneous infection begins with a firm tender nodule which may develop into a large walled or unwalled mass. The other presentations are nodules and blisters. There is no tendency towards lymphatic spread and dissemination is uncommon.

Case Report

A 20-year-old patient, fruit vendor by occupation, presented with a nodule on right leg of 2 years duration. Patient gave a history of thorn prick which was followed by a mildly painful swelling. Lesion gradually increased in size. Therapy with various antibiotics and anti-inflammatory drugs failed to elicit any response.

From the Department of Skin and VD, Deccan College of Medical Sciences, Princess Esra Hospital, Shah Ali Bunda, Hyderabad, India.

Address correspondence to : Dr V K Somani
2-1-438/A, Nalla Kunta, Hyderabad-500044.

On examination, the nodule was about 3 inches x2 inches in size and was firm and slightly tender on palpation. The skin over the nodule showed pigmentation and thickening and there were no signs of inflammation (Fig. 1)



Fig. 1. Leg showing nodule with pigmentation.

Skin biopsy showed fibrosis of dermis and perivascular lymphocytic infiltrate. Another biopsy specimen sent for culture and sensitivity showed growth of *Curvularia lunata* (Fig. 2), which was sensitive to ketoconazole, clotrimazole and fluconazole. Smears from the growth showed typical conidiophores bearing transversely septate four celled and slightly curved apical conidia.

Radiograph of the leg was normal and Elisa for HIV was negative. The routine



Fig. 2. Slide showing *Curvularia lunata* bearing apical conidia (H&E 100x).

laboratory investigations like complete urine examination, haemogram etc, were within normal limits. After screening the patient for liver function tests and renal function tests the patient was started on fluconazole 100 mg/day with gratifying response after one month. The size of the nodule and symptoms reduced and the dose of fluconazole was tapered to 50 mg/day and the lesion completely subsided after one more month of therapy.

Discussion

Ajello coined the term phaeohyphomycosis in 1974 which refers to mycosis caused by dematiaceous (brown or black) fungus. The list of dematiaceous fungi

capable of inciting phaeohyphomycosis continues to grow with species classified in 17 distinct genera having been documented as authentic aetiologic agents.¹ With the scourge of HIV infections looming large, the list of fungi will keep escalating as agents of disease.

The dematiaceous fungus is usually associated with wood or soil and injury by sticks, thorns, splinters is a common cause. The profession of our patient exposed him to these hazards. These fungi are sensitive to amphotericin B, 5-fluorocytosine, miconazole, fluconazole, ketoconazole and itraconazole. The genus *Curvularia* contains 35 spp which are mostly subtropical and tropical plant parasites.

The present patient was put on fluconazole on the basis of culture sensitivity report and showed a gratifying response in just 2 months, with almost complete disappearance of the lesion.

Reference

1. McGinnis MR, Rinaldi MG, Winn RE, Emerging agents of phaeohyphomycosis: pathogenic species of *Bipolaris* and *Exserohilum*. *J Clin Microbiol* 1986; 24: 250-9.