CHROMOMYCOSIS WITH SOME UNUSUAL FEATURES

Vijay Battu, M Ramam, J S Pasricha and L N Mohapatra

A 68-year-old male carpenter from Meghalaya developed chromomycosis manifesting as verrucous plaques on the leg and penis. Involvement of the bone and location of the lesions on the penis is unusual in chromomycosis. The diagnosis was confirmed by demonstration of the rounded equatorially split sclerotic cells in potassium hydroxide mounts and the biopsy. *Fonsecea pedrosoi* was grown in culture. Mebendazole (100 mg twice daily orally for 3 weeks) was unhelpful.

Key words : Chromomycosis, Bone lesion, Penile lesion, Fonsecea pedrosoi.

Chromomycosis is seen all over the world,[1] but it is reported to be more prevalent in the countries where barefoot walking and trauma are common, and abrasions are frequently neglected. The causative agents are dematiaceous fungi, of which *Fonsecea pedrosoi* is the commonest.[2] Other fungi frequently isolated from these cases belong to the genera *Phialophora*, *Cladosporium* and *Hormodendrum*. For diagnosis, it is mandatory to demonstrate the fungal elements in the scrapings or the biopsy, and to culture the organism. Clinically, the two common varieties are, the verrucous dermatitis type, and the ulcerative type; but psoriasiform varieties[2] are also known, and a cold abscess may also be simulated.[3] Generally, the infection is confined to the skin and subcutaneous tissues, though bone involvement,[4] brain abscess,[5] and a disseminated infection ending fatally have been documented.[6] The first case report from India was by Thomas et al in 1957,[6] and subsequently more cases have also been reported.[7-12] In India, cases are more common in the north-eastern regions like Assam,[7] but have also been reported from other states like Punjab,[8] Karnataka,[9] Maharashtra,[10] Andhra Pradesh[11] and Tamil Nadu.[12] We are reporting the case seen by us who had two unusual/uncommon features.

From the Departments of Dermato-Venereology and Microbiology, All India Institute of Medical Sciences, New Delhi-110 029, India.

Address correspondence to : Dr. J. S. Pasricha.

Case Report

Approximately 2 years ago, a 68-year-old male carpenter from Shillong (Meghalaya) noticed a few, asymptomatic, 1-2 mm erythematous papules with a slight scaling on the dorsal preputial skin which gradually became

Fig. 1. Lesions distorting the penis.

thickened, almost hiding the external urinary meatus. Within 2-3 months, 4 similar plaques developed on the shaft of the penis also (Fig. 1). About 6 months later, he observed a reddish papule on the front of his left leg, just below the tibial tuberosity, which slowly enlarged to become a verrucous mass covering an indurated plaque, 5 cm×3 cm in size. A few months later, 3 similar but smaller lesions appeared on the adjoining skin also (Fig. 2). The patient

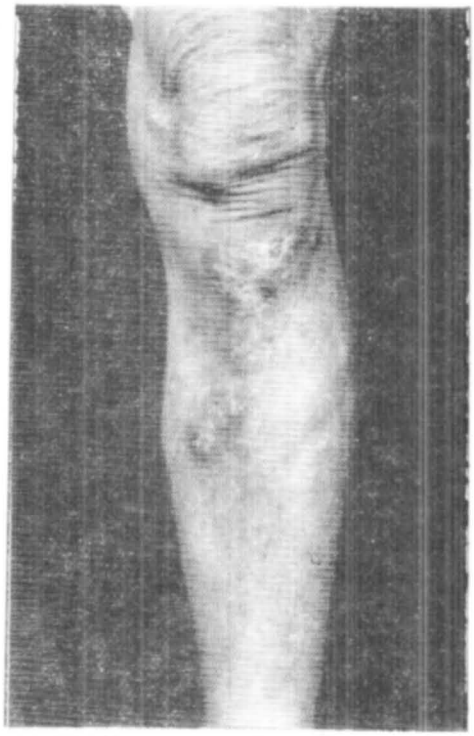

Fig. 2. Verrucous plaques on the leg.

had applied a number of local ointments, but without any benefit. The regional lymph nodes were not enlarged. There were no other symptoms and no other abnormality.

The patient's haemogram, blood sugar, blood urea, serum bilirubin, serum proteins, SGOT, SGPT, serum alkaline phosphatase, urinalysis and chest x-ray were normal. Stools contained roundworm ova. X-ray of the left tibia revealed osteomyelitic changes in its upper

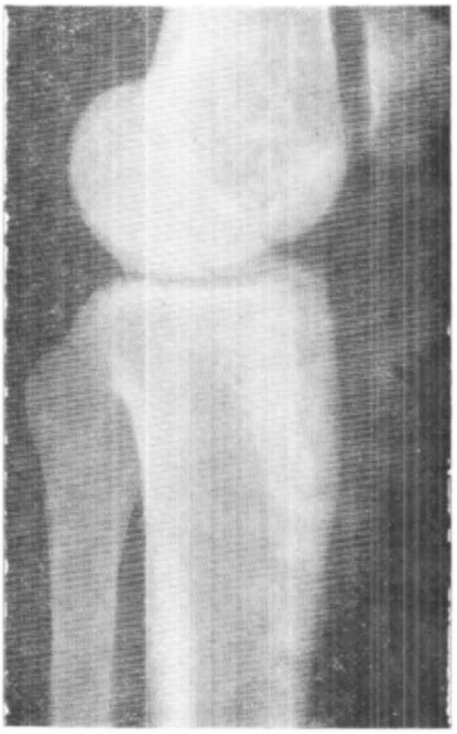

Fig. 3. Osteomyelitic area on the upper tibia.

part (Fig. 3). A potassium hydroxide mount of scrapings from the surface of the lesion showed thick-walled brown spherical bodies with equatorial splitting (Fig. 4). Culture on Sabouraud's medium grew *Foncecea pedrosoi*. Skin biopsy showed a chronic inflammatory infiltrate with rounded brown sclerotic cells within the macrophages.

Comments

Our patient had the classical verrucous lesions which were multiple, but to our knowledge, involvement of the male external genitalia has not been reported so far. Kakati and Dey[7] had earlier reported involvement of the female genitals (labia majora). Contiguous spread to the bone as seen in our case is also unusual.

The therapeutic outcome has been frustrating. Amphotericin B intralesionally,[2] surgery,[5] flucytosine[10] (37.5 mg orally, QID), calciferol

Fig. 4. Potassium hydroxide mount showing sclerotic cells.

(600,000 units daily) with or without potassium iodide[11] (upto 3 g/day orally), and INH[13] (10 mg/kg/day) have produced better results than ketoconazole[14] (200 mg/day orally), potassium iodide alone,[11] thiabendazole[15] (25 mg/kg/day), topical heat therapy[15] and x-ray therapy.[17]

Our patient was initially started on thiabendazole, but after 2 weeks it was unavailable and so mebendazole (100 mg twice a day orally) was tried for 3 weeks, but without any improvement.

References

1. Barlow AJE and English MP : Fungus diseases, in : Recent Advances in Dermatology, No. 3, Editor, Rook A: Churchill Livingstone, Edinburgh, 1973; pp 33-68.
2. Takahashi S and Maie O : Cutaneous chromomycosis : Therapy with amphotericin B injection, Hautarzt, 1983; 32 : 567-570. Quoted in Year Book of Dermatology. Editors, Sober AJ and Fitzpatrick TB : Year Book Medical Publishers, Inc, Chicago, 1983; p 135.
3. Symmers W St C Snr : New style cold abscesses, Brit Med J, 1971; 2 : 337.
4. Lal S, Garg BR, Rao RS et al : Chromomycosis caused by *Exophiala jeanselmei*, Ind J Dermatol Venereol Leprol, 1984; 50 : 119-121.
5. Vollum DI : Chromoblastomycosis—a review, Brit J Dermatol, 1977; 96 : 454-458.
6. Thomas E, Job CK and Hadley GC : Chromoblastomycosis, Ind J Med Sci, 1957; 11 : 570-573.
7. Kakati DM and Dey NC : Chromoblastomycosis in India, J Ind Med Assoc, 1957; 28 : 351-355.
8. Rajam RV, Kandhari KC and Tirumalachar MJ : Chromoblastomycosis caused by a rare dematiaceous fungus, Mycopathologica, 1958; 9 : 5-19.
9. Dube B and Dube R : Chromoblastomycosis in India. A review and report of 2 cases, Ind J Med Sci, 1966; 20 : 12-16.
10. Bennet JE : Flucytosine, Ann Int Med, 1977; 86 : 319-322.
11. Bonilla E : Treatment of chromomycosis with calciferol : Report of 3 cases, Arch Dermatol Syphilol, 1954 ; 70 : 665-667.
12. Arellano-Ocampe F, Tamayo Perez R and Victoria RV : *Cladosporium carrioni* chromomycosis in 4 patients and treatment, Dermatologica, 1968; 10 : 305.
13. Gokhale BB, Padhye AA and Tirumalachar MJ : A case of black papulo-squamous skin infection by *Hormodendrum* species, Bull Cal Soc Trop Med, 1959; 7 : 41.
14. Sivaramakrishna Naidu P, Raja Babu KK, Leela Naidu PS et al : Chromoblastomycosis, Ind J Dermatol Venereol, 1972; 38 : 78-82.
15. Bhaktaviziam C, Mathai R, Mammen A et al : Chromoblastomycosis in India, Ind J Dermatol Venereol, 1970; 36 : 185-188.
16. Carrion AL : Current Dermatologic Management, Editor, Maddin S : CV Mosby Company, Saint Louis, 1970; pp 67-68.
17. Jones HE : Ketoconazole, Arch Dermatol, 1982; 118 : 217-219.
18. Bayles MAH : Chromomycosis : Treatment with thiabendazole, Arch Dermatol, 1971; 104 : 476-485.
19. Tagami H, Ohi M, Aoshima T et al : Topical heat therapy for cutaneous chromomycosis, Arch Dermatol, 1979; 115 : 740-741.
20. Howles JK, Kennedy CB and Garvin WH et al : Chromoblastomycosis, Arch Dermatol Syphilol, 1954; 69 : 83-90.