CHROMOBLASTOMYCOSIS
(A case report)

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Summary

A case of chromoblastomycosis is reported. The possibility of lymphatic and probable haematogenous dissemination is discussed. Encouraging result with oral administration of Thiabendazole (a broad spectrum anthelmintic) is presented.

Chromoblastomycosis is a rare chronic fungal infection of skin and subcutaneous tissue, usually thought to occur in tropical and sub-tropical areas. It is caused by a number of different pathogenic species, most common of which are Phialophora pedrosi, P. compactum, P. verrucosa. A few cases have been reported from India and Nepal[1-9].

This paper presents one more case of chromoblastomycosis seen in the Department of Dermatology and Venereology of Medical College and Hospital, Rohtak (Haryana).

Case Report

Male farmer, aged 40 years sought advice for extensive warty lesions on the right lower limb. The lesions had started about 20 years ago as numerous warty growths on the right thigh just above the knee, whick slowly spread downwards covering the leg and dorsum of his right foot. Two years earlier similar warty lesions appeared on both the arms, followed a year latter by subcutaneous nodules in both forearms, and a solitary subcutaneous nodule in the lower part of left leg. Earlier an unsuccessful attempt was made by the patient to eradicate the lesions by burning them with topical application of an acid. There was no history of trauma.

At the time of admission into the hospital the patient had cutaneous verrucous masses all over the right lower limb and both upper arms, many showing confluent scaly plaques. Discrete subcutaneous nodules were present in both the forearms and a solitary larger one on the left leg. Crusted lesions with small suppurations were also seen amongst the warty growths. The inguinal lymph nodes on the right side were enlarged, firm and slightly tender. The general health of the patient was good and systemic examination revealed no abnormality except a few coarse crepitations at the bases of the lungs in the chest.

Patient was admitted with two possible diagnoses namely Lupus Vulgaris or

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Deep Mycosis. Biopsy of the skin showed moderate degree of pseudo-epitheliomatous epidermal hyperplasia with chronic dermal inflammatory infiltrate showing tuberculoid granulomas and localised areas of suppurating tubercles. Thick walled brown spherical spores 8-10 microns in size were present in clusters and singly in abscesses, in the giant cells and extracellularly (Fig. 1 Page No. 49). Some of the cells showed division by transverse septa. Lymph node biopsy from right inguinal region and biopsies of subcutaneous nodule from right forearm showed the presence of brown thick walled spores. Culture was negative for phialophora. Other investigations at the time of first admission revealed the following results. Blood, T. L. C. : 7000/ cmm, D. L. C. : P.67%, L-29%, E-4%, M-0%, Hb, 9.0 g%, E. S. R. 110 mm. first hour Westergren S. T. S. — negative, L. F. T. — Normal Blood urea - 27 mg%, Urine and stools — no abnormality. X-ray chest showed nodular opacities and increased striations in the middle and lower zones of both lungs. Sputum was negative for A. F. B.

X-Ray left elbow region — showed a bony defect in the olecranon of the ulna.

Treatment

Potassium Iodide was administered orally for a short while but had to be abandoned because of intolerance. Isonex 300 mg daily was given for 6 months without any improvement. Patient was readmitted into the hospital and during his first fortnight of stay in the hospital extension of lesions by satellite lesions on the skin and appearance of new subcutaenous nodules in a linear distribution suggesting lymphatic spread was noticed.

He was then put on Thiabendazole tablets for 2½ months with local application of 5 per cent salicylic acid ointment. The cutaneous lesions flattened considerably (Fig. 2 Page No. 49) and the subcutaneous nodules except a few disappeared completely and the tenderness of olecranon vanished. The patient was discharged and advised to continue Thiabendazole. In a subsequent follow up it was revealed that the patient could not take the medicine because of its non-availability and high cost.

Comments

It is a general belief that fungi which cause chromoblastomycosis exist in the soil or in vegetations and are inoculated directly into the skin after trauma. The primary lesion develops at the site of inoculation usually hands and feet and spreads locally on the skin by contiguity. Infection of mucus membrane is most unusual. Dissemination is extremely rare. Ive and Clark[10] reported linear lesions suggestive of lymphatic spread. Azulay and Sarruya[11] reported a generalised case of chromoblastomycosis with lymph node involvement suggesting a haematogenous dissemination. The present case showing appearance of lesions in the other arm and leg, numerous subcutaneous nodules, few in a linear from, lymph node involvement and bony involvement with osteolytic changes indicate lymphatic and probable haematogenous dissemination.

In our patient potassium iodide had to be abandoned because of intolerance. Isonex (Isonicotinic acid Hydrazide) for 6 months showed no change. Thiabendazole was tried when the condition had become considerably generalised. Initially it was given as 1.5 gm. in three divided doses. After one month the dose was reduced to 1 gm daily but due to non-availability and high cost of the drug the patient discontinued its use after 2½ months. Simultaneously 5 per cent Salicylic acid ointment was applied locally on the warty lesions. Quite a

number of subcutaneous nodules disappeared completely, tenderness in the olecranon vanished and no fresh lesions appeared. The verrucous lesions of the skin markedly flattened out (Fig. 2 Page No. 49). Histopathological examination done at this stage, showed no spores although dermal granulomatous exudate was still profuse. After 2 follow-up visits the patient defaulted. Clinical improvement with thiabendazole in cases of chromoblastomycosis has been reported by Elfern Solane[12]. This drug has also been found effective against chromomycosis in vitro[13-14].

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