CHROMOBLASTOMYCOSIS

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Chromoblastomycosis is a rare mycotic disorder of the skin and the Indian literature has only a few cases on record. The first report of a patient was by Thomas et al[3] in 1957 and subsequently isolated case reports have been reported including five from South India. The present case would be the first from Andhra Pradesh region.

Case Report :

A male patient V.S., aged about 25 years, farmer by occupation is a resident of Obulapalle of Cuddapah District of Andhra Pradesh and was first seen by us on 9–12–1970. The present complaint started when he was just 5 years old. They are said to have started as small papular lesions on the extremities, which subsequently ulcerated with formation of crusts. The lesions have been foul smelling, discharging sero-sanguinous fluid. The lesions were asymptomatic. No history of trauma. No history of a similar disease in the family.

On examination, thick, hyperkeratotic heavily crusted lesions, discrete, and disseminated over the extremities, face and trunk are seen (Fig. 1 to 3). Crusts are easily detachable exposing highly vascularised raw areas. Crusts are yellowish grey, discharge is sero-sanguinous and foul smelling. A few apparently healed lesions with thin scars are present. Both sides inguinal lymphnodes are enlarged discrete, firm and not tender. Systemic examination revealed no abnormality.

A possible diagnosis of a fungal (Chromoblastomycosis) or a venereal or non-venereal spirochaetal disease was thought of and investigations were done in this direction.

Investigations :

Urine - Albumin, Sugar and Microscopic : NAD

Motion examination : Nil abnormal.

T.C. :–14,000/cmm.
D.C. : (on 12–12–70) $P_{..}$; L_{28} ; E_{42};
D.C. : (on 15– 2–71) P_{46} ; $L_{.4}$; E_{10};

E.S.R. : 70 mm – 1st hour.

Blood Group : 'O'

R.B.C. : 4.25 million per cmm. HB. 12.5 G%

Montoux test positive. 11 mm.

X-ray chest : Normal.

X-ray long bones : Soft tissue calcification present. No bony lesions. (Fig. 4)

D.G. for trepanema – Negative.

Blood VDRL : Negative.

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Fig. 1

A heavily crusted, hyperkeratotic lesion on the face

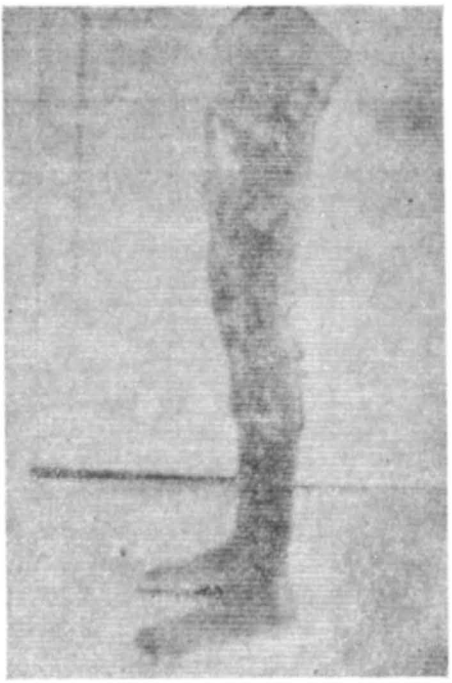

Fig. 2

Warty, hypertrophic lesions on the extremities

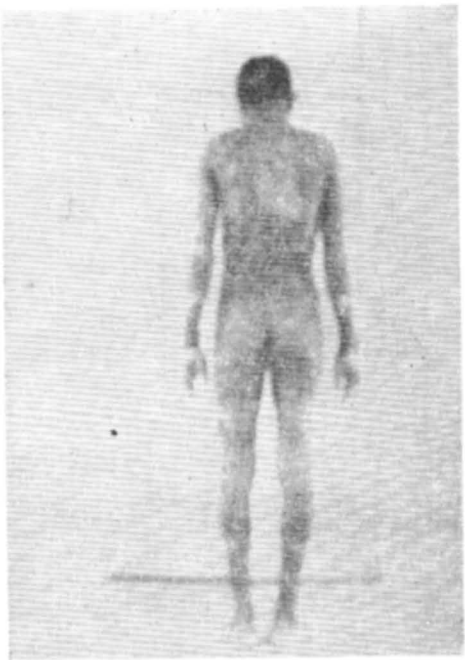

Fig. 3

Lesions distributed all over the body

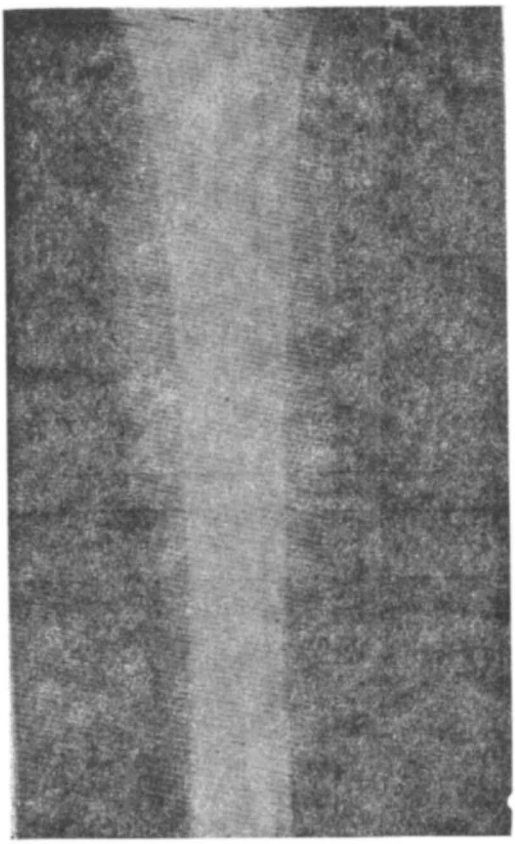

Fig. 4

Soft tissue calcification. X-ray both bones right leg

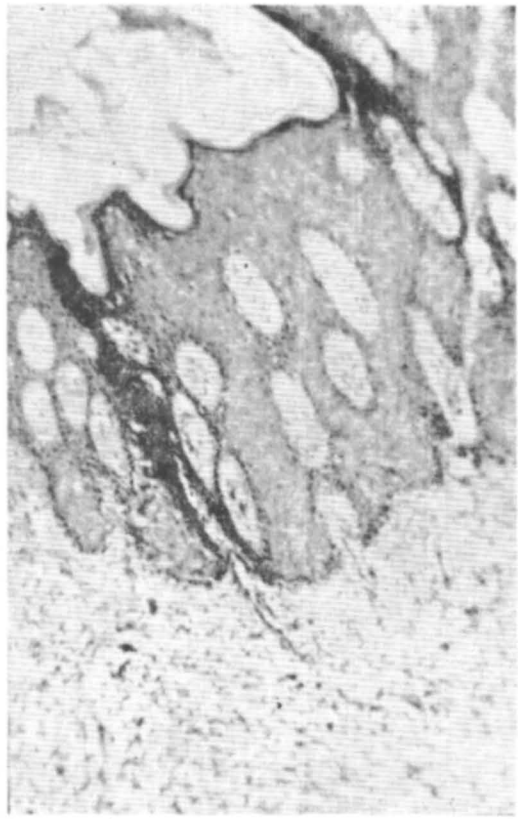

Fig. 5

Hyperkeratosis, acanthosis and pseudoepitheliomatous hyperplasia-H & E, low power

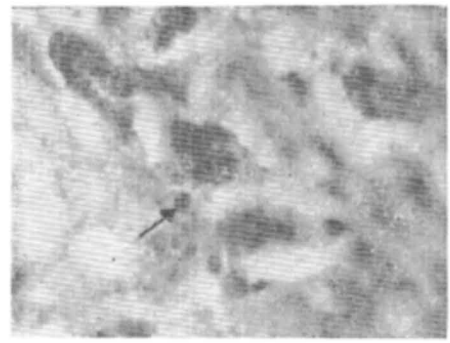

Fig. 6

Thick walled round bodied spores - Arrow pointing to spores. High power

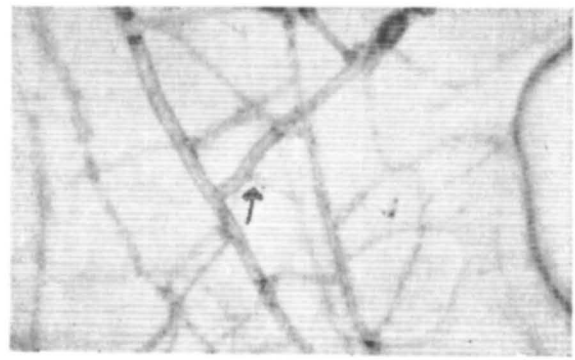

Fig. 7

Cleistotheca like body and hormodendrum type of conidiophore seen

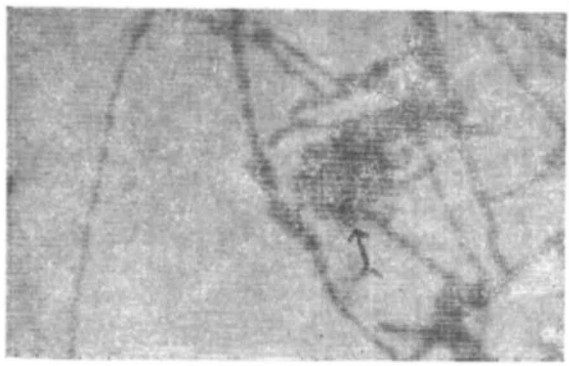

Fig. 8

Phialophore type of conidiophore seen

KOH Mount: Direct microscopy: Thick walled spherical dark brown spores were seen. Culture on Sabouraud's glucose agar: Hormodendrum pedrosoi grown. (Figs. 7 & 8).

Biopsy of the lesion: (No. 239/71): Epidermis – Hyperkeratosis, acanthosis and pseudoepitheliomatous hyperplasia seen (Fig. 5).

Dermis: The reaction is essentially a granuloma with a cellular infiltrate consisting of lymphocytes, polymorphonuclear leucocytes, large mononuclear cells, epithelioid cells and Giant cells of both Langhan's and Foreign body type. The infiltrate is focal and diffuse at places. Sclerotic fungal cells are seen as yellow to brown, rounded, oval shaped bodies, measuring about 7 to 10 microns in diameter. The walls of the cells are thick and dark. The cytoplasm is granular. The cells are seen singly or in groups or chains, lying freely in the diffuse cellular infiltrate (Fig. 6).

Diagnosis: Granulomatous cutaneous mycotic infection – Chromoblastomycosis. Treatment and progress as on 1–8–71. Antibiotics to control secondary infection were first given. Three interupted courses of 10 injections each of Entodon one amp. intravenously daily are given, together with high doses of Mist. Pot. Iodide and supportive therapy. There had been considerable, if not complete improvement in that new lesions have been few and far in between and existing lesions tending to clear off. Attempts are made to secure the antifungal drug Amphotericin B from U.S.A.

Discussion:

Although cases of Chromoblastomycosis are reported from India it is still a rare mycotic affection[1]. But it is possible that more cases will be recorded in future, provided the physician or the pathologist enters chromoblastomycosis in his differential diagnosis[2].

The unusual pattern of the disease, absence of D.G. and serological positivity prompted us to suspect the possible diagnosis of chromoblastomycosis from the beginning. Direct KOH examination, culture and histopathological examination have confirmed the diagnosis.

Although there was no definite history of trauma, it is possible that the patient had sustained a trivial injury, while he was playing and the source of infection could have been from the soil. It has been said that chronicity is the hall mark of chromoblastomycosis and it should be noted that in the present case the disease has been present for more than 20 years.

It is interesting to note that a few cases of chromoblastomycosis have been marked by blood and tissue eosinophilia. In a recent report[1], Bhakta Viziam et al cited cases (including one of their own) manifesting increased eosinophils in the blood and tissues of cases of chromoblastomycosis. They have also thrown an interesting suggestion whether the eosinophilia decreases with the treatment of the disease.

It is pertinent to note that the present case had also shown an initial eosinophilic count of 42%. This was not accountable to any systemic or local cause. Consequent to treatment of the patient with Iodides, the eosinophilic count has come down to 10% with corresponding improvement in the clinical condition. Since the eosinophilic count has come down with the decline of the activity of the disease, it is worthwhile to investigate further on the relationship between the activity of the disease and eosinophilia.

Summary:

A case of chromoblastomycosis with significant eosinophilia is presented. It is interesting to note that the eosinophilia has come down with treatment.

Acknowledgements :

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1. Bhaktaviziam, C et al: Chromoblastomycosis in India. Indian J. Derm. & Vener., 36 : 185 – 188, 1970.
2. Klokke, A.H.: Chromoblastomycosis. J. Ind. Med. Assn., 43 : 340 – 341, 1964.
3. Thomas, E., Job, C.K. and Hadley, G.C.: Chromoblastomycosis. Ind. J. Med. Sci. 11 : 570 – 573, 1957.

False

Although a number of Dermatitis Herpetiformis patients have proven gluten sensitive enteropathy; gluten free diet only sometimes improves the skin lesions whereas it always improves the gastrointestinal symptoms:

Reference: Arch Derm 100: 129-135, 1969.