CHRONIC PROGRESSIVE DISSEMINATED MUCOCUTANEOUS HISTOPLASMOSIS (Case Report)

THANKAPPAN T. P. * VIJAYALEKSHMY A. † RAMACHANDRAN NAIR P. ‡
JACOB ZACHARIAH || PAVITHRAN K. § IPE P. T. $

Summary

An unusual case of *Histoplasma Capsulatum* infection with cutaneous nodules, a feature of African histoplasmosis and granulomatous lesions, a manifestation of classical histoplasmosis is being reported.

KEY WORDS: Histoplasmosis, cutaneous, granulomatous.

Case Report

A 23 years old male farmer presented to Dermatology Department with cutaneous nodules over the face, ulceration of lips, tongue and genitalia, difficulty in swallowing, hoarseness of voice and excessive salivation of 6 months' duration. He had recurrent attacks of painful ulcers of the mouth and diffuse hypopigmented mildly scaly patches over the trunk for a period of 12 years.

Physical examination revealed a mildly anaemic youth of average build with extensive ulceration of the lips, tongue, elbows, heel, nail beds, penis and scrotum. There was no generalised lymphadenopathy, hepato splenomegaly or any other detectable systemic abnormality.

Laboratory examination revealed mild leukocytosis, with a normal differential count and normal blood picture. Buffy coat did not demonstrate any abnormal cells. No LE cells were demonstrated. Liver and kidney functions were normal. Roentgenogram of chest and bones were also normal. Pus and sputum cultures were sterile. No candida albicans or AFB were demonstrated in the ulcers or nodules. Behcetin test was negative. Histologic examination of the nodules and ulcers and a culture for fungus from the lesions were done.

Histopathology

A diffuse infiltrate of large foam cells were seen in the dermis extending upto the basal layers of the epidermis. In between the foam cells collections of neutrophils were also present. Deeper in the dermis foam cells and macrophages showed attempt to form

* Tutor in Dermato – Venereology, Medical College Hospital, Kottayam.
† Associate Professor of Pathology, Medical College, Kottayam.
‡ Associate Professor of Dermato-Venereology, Medical College Hospital, Kottayam.
|| Associate Professor, Dermato-Venereology, Medical College Hospital, Alleppey.
§ Assistant Professor, Dermato-Venereology, Medical College Hospital, Kottayam.
$ Professor of Microbiology, Medical College, Kottayam.

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tuberculoid granuloma. Foam cells were seen to contain small intra-cellular organisms measuring $2 \times 4\mu$. PAS and Gomori silvermethenamine staining were positive.

Culture

The tissues from the nystatin treated ulcer and nodule were cultured at room temperature in Sabouraud's dextrose agar with actidion and chloramphenicol and the tiny cottony colonies were subcultured. The typical cottony white buff colonies were seen in the slopes in 4 weeks. The culture mount showed mycelia with conidiophores, microconidias and typical tuberculate macroconidias, diagnostic of *Histoplasma capsulatum.*

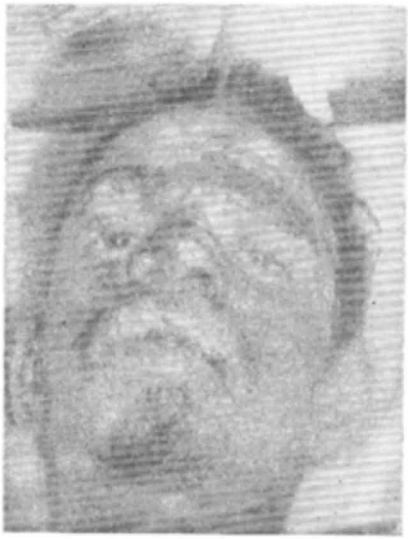

Fig. 1
Photograph showing ulceration of the lips and nodules of face in a case of Disseminated Histoplasmosis.

Discussion

Histoplasmosis is a granulomatous disease of the mucocutaneous tissues, liver, spleen and lung caused by a small intra cellular parasitic yeast cells measuring $2 \times 4\mu$ called *Histoplasma capsulatum*[1]. African histoplasmosis is characterised by cutaneous nodules and granulomatous lesions with giant cells containing large fungus cells measuring $8-15\mu$. Skin may ulcerate and in generalised infection lymph nodes, spleen, liver, lung and bones may be involved. Infection usually occurs through inhalation of the spores[2].

Panja and Sen were the first to report a case of histoplasmosis from India[3]. Reports of histoplasmosis from different parts of India appeared in the literature after this. Cutaneous nodules are most common in African histoplasmosis but a rare manifestation in classical histoplasmosis[4].

An unusual presentation of histoplasmosis with cutaneous nodules, a feature of *Histoplasma capsulatum var duboisii* infection and granulomatous lesions common in classical histoplasmosis was reported by Thammayya and Sanyal[5].

The possibility of African histoplasmosis was excluded in the present case by the presence of small yeast cells measuring $2 \times 4\mu$ in the cytoplasm of mononuclear cells and by the absence of giant cells. Although there was no evidence of any pulmonary or other visceral involvement at the time of admission, and primary cutaneous histoplasmosis is a very rare entity usually resolving without treatment[2], we made a clinical diagnosis of chronic progressive disseminated mucocutaneous histoplasmosis in our patient.

Lack of awareness of the varied clinical presentations may be the cause of paucity of case reports from our part of the country. Soil culture from the patient's residence was done and did not yield *Histoplasma Capsulatum.* Patient's close relatives were screened for evidence of infection with histoplasmin skin test and all showed negative response. An elaborate skin test

Fig. 2
Photomicrograph showing the yeast cells 2×4 μ in the histiocytes.

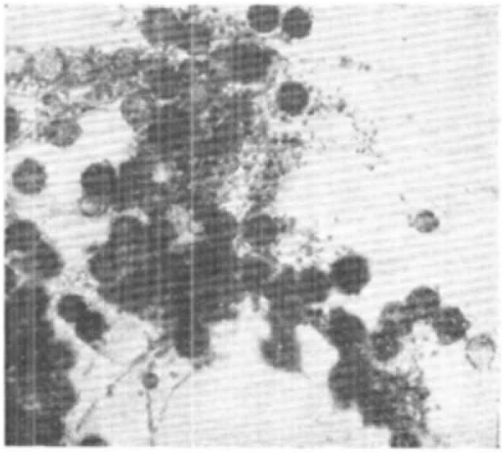

Fig. 3
Photograph of the culture mount showing Mycelia, conidiophores, microconidia and macroconidias. Typical tuberculate appearance diagnostic of *Histoplasma Capsulatum* is seen.

survey, soil culture and detailed investigations of suspicious cases may bring more cases to light and endemic areas if any may be mapped out. Our patient made an uneventful recovery with a total dose of 4 gms of amphotericin B with rifampicin and is being followed up for any relapse.

Acknowledgment

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