



**Research Article**

**DISSEMINATED CUTANEOUS HISTOPLASMOSIS IN IMMUNO-COMPETANT PATIENT**

**Anup Singh\***

Department of Medicine, Institute of Medical Sciences, BHU, Varanasi

**ARTICLE INFO**

**Article History:**

Received 12<sup>th</sup> January, 2018

Received in revised form 24<sup>th</sup>

February, 2018 Accepted 10<sup>th</sup> March, 2018

Published online 28<sup>th</sup> April, 2018

**ABSTRACT**

A middle age man presented with fever of long duration, extreme generalized weakness, loss of appetite and weight presented with maculopapulonodular skin lesions, anemia, hepatosplenomegaly. History of bird indwelling near his home, clinical finding, lab investigations, bone marrow aspirate and skin lesion histopathologic evidence led to the diagnosis of disseminated histoplasmosis. Treatment with AmphotericinB showed dramatic improvement.

**Key words:**

Histoplasmosis, Amphotericin B, Itraconazole, Cutaneous leishmaniasis

*Copyright©2018 Anup Singh. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.*

**INTRODUCTION**

Histoplasmosis, also known as Cave disease, Darling disease, Reticuloendotheliosis was described by Samuel Darling<sup>1</sup> in 1906 who first identified histoplasma in visceral tissue and bone marrow of a man whose death was initially attributed to miliary tuberculosis.

Histoplasma capsulatum is a dimorphic fungus exists in the mould form at soil temperature and switches to the yeast form at normal human temperature. Histoplasmosis is endemic in east central part of United States akin to tuberculosis in India. Histoplasmosis is acquired by inhalation of microconidia (infective form) especially in immunocompromised host<sup>2</sup>. It is rare in immunocompetant host. In India histoplasmosis seems to be prevalent in Gangetic plains especially in Westbengal<sup>3</sup>. Panja and Sen reported the first case of disseminated histoplasmosis (DH) from Kolkata<sup>4</sup>. Among the forms of histoplasmosis reported from India, progressive disseminated histoplasmosis (PDH) is the rare and PDH with skin manifestation is one of the rarest presentation in countries like India.

We report a case of disseminated histoplasmosis with florid skin lesions in a immunocompetant host on account of its rarity and dramatic improvement..

**Case Report**

A 49years old male from Saharanpur, Uttar Pradesh, India presented to us at with chief complaints of 6 months history of fever and 3 months history of skin lesions.

**\*Corresponding author: Anup Singh**

Department of Medicine, Institute of Medical Sciences, BHU, Varanasi

Fever was moderate to high grade, continuous in nature and sometimes associated with chills and rigors. It was not associated with cough, palpitation, history of blood transfusion, high risk behavior, abdominal pain, vomiting, jaundice, joint pain, bleeding manifestations, headache, vomiting, seizure or unconsciousness. From last 3 months he developed skin lesions which covered his face, neck, chest, and back. He also complained of generalized weakness associated with loss of appetite and significant weight loss. On general examination, the patient had normal vitals, with moderate pallor, and bilateral pitting pedal edema. There were multiple macular, papular and nodular lesions over face, neck, back, chest and abdomen. They were non-itching and having crust with few painful lesions because of superficial ulceration. Abdominal examination revealed hepatomegaly of 6cm which was soft non-tender and spleen was 8cm enlarged along its axis. Rest systemic examination was in normal limit.

Investigation revealed pancytopenia with hemoglobin of 6.1gm/dl, total leucocyte count of 3400/ $\mu$ L and platelets were 90000/ $\mu$ L. Renal profile was normal, however, liver function test showed slightly raised trasaminases [serum glutamic-oxaloacetic transaminase/ Serum glutamic pyruvic transaminase (SGOT/PT) -69/55 IU/L], raised alkaline phosphatase (987 IU/L). Lactase dehydeogenase (LDH) was slightly raised (425U/L). General Blood picture (GBP) showed pancytopenia and yeast form of histoplasma. Bone marrow was showing multiple macrophages studded with yeast form of histoplasma. Serum cortisol was normal. Skin biopsy was suggestive of histoplasmosis. CD4 count was 72/ $\mu$ L. High resolution computerized tomography (HRCT) chest showed multiple hilar lymphadenopathy with peripheral calcification. Treatment with AmphotericinB was started (1mg/kg) with regular monitoring and it was continued for 6 weeks, patient

improved clinically and he was switched over to maintenance oral Itraconazole therapy.(Fig 1)



Figure 1

a,c: Multiple macular, papular and nodular lesions over face, neck  
c,d: Healed lesions after treatment

## DISCUSSION

Histoplasmosis is an infrequently reported disease from India and only sporadic case reports have appeared in literature from different region of India<sup>5</sup>. Numerous case series have been reported histoplasmosis from all over India, largest being from Delhi a compilation of 37 patient from all over India<sup>6</sup>.

In India most commonly patient presents with fever, weight loss and oropharngial ulceration. disseminated form is rarely reported and disseminated form along with florid skin manifestation is one of the rarest entity in India. Vanbreuseghem, in extensive review of the literatures, concludes that skin lesions in histoplasmosis are rare.<sup>7</sup> Skin lesions are more commonly found in HIV patient. Histoplasmosis is rarely reported by dermatologist in India because of lack of awareness and more commonly they present with palatal ulcer.

Of the 25 authentic reported cases between 1968 to1992, 19(76%) have lesion confined to oral cavity.<sup>5</sup> Histoplasmosis is considered to be endemic in certain East Indian states like West Bengal where a study showed a skin positivity of 9.4% to histoplasmin antigen<sup>8</sup>. There are few sporadic case reports from South India as well. Histoplasmosis has emerged as an important opportunistic fungal infection in immunocompromised patient, including those with AIDS<sup>7</sup>. It is suggested that AIDS patient with fever and hepatosplenomegaly, acute PDH should be considered irrespective of the fact of endemicity. Disseminated histoplasmosis presenting as fever, weight loss, malaise and hepatosplenomegaly may also mimic leishmaniasis. Our case was referred to us as a case of leishmaniasis

## References

1. Darling, S.T. 1906. A protozoön general infection producing pseudotubercles in the lungs and focalnecrosis in the liver, spleen and lymph nodes. *Journal of the American Medical Association*. 46:1283-1285
2. J.F Murray, J.Mills (Part II). Pulmonary infectious complication of Human immunodeficiency virus. *Am Rev Respir Dis*.1990; 141:1582.
3. Sanyal M, Thammayya A. *Histoplasma capsulatum* in the soil of Gangetic plain of India. *India J Med Res*.1975; 63:1020-8.
4. Panja G, Sen S: A unique case of histoplasmosis: *J. Indian Med. Assoc* 1959,23:257-278
5. Vanbreuseghem R. Skin lesions in histoplasmosis. *Arch Belg Dermatol Syphiligr* 26:501-507, 1970
6. Padhye AA, Pathak AA, Katkar VJ, Hazare, VK, Kaufman L. Oral histoplasmosis inIndia: A case report and an overview of cases reported during 1968-92. *J Med Vet Mycol* 1994;32:93-103
7. Randhawa HS, Khan ZU. Histoplasmosis in India: Current Status. *Indian J Chest Dis Allied Sci*.1994;36:193-213
8. Sanyal M, Thammayya, skin sensitivity to histoplasmin in Calcutta and its neighbourhood *Indian J. Dermatol Venereol leprol* 1980;46:94-8

### How to cite this article:

Anup Singh (2018) 'Disseminated Cutaneous Histoplasmosis in Immuno-Competant Patient', *International Journal of Current Advanced Research*, 07(4), pp. 12131-12132. DOI: <http://dx.doi.org/10.24327/ijcar.2018.12132.2127>

\*\*\*\*\*