

Cutaneous histoplasmosis mimicking leprosy – a case report

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Introduction

Histoplasmosis is a disease caused by *Histoplasma capsulatum*, a dimorphic fungus. Infection occurs by breathing in the spores that become airborne or from visiting a cave inhabited by bats. This is more commonly found in people with immunodeficiency such as those with cancer or acquired immune deficiency syndrome. Pulmonary involvement is the most common clinical presentation. The skin lesions includes polymorphic papules, plaques, pustules, nodules, mucosal ulcers, punched out ulcers, purpuric lesions, panniculitis, abscesses, and cellulitis.

Case history

60 year old Kandyan dancer presented with a history of gradually progressive erythematous plaques lesion over face and neck for 1 year duration (Figure 1 and 2). He denied any chronic cough or any other systemic manifestations. He had a history of exposure to birds in caves and travel history to different countries including U.S.A. He didn't have any contact history of leprosy. There were no ulcerations or crusting or umbilication over the plaques. There were no hepatosplenomegaly or lymphadenopathy. His previous biopsy revealed granulomatous inflammation suggestive of borderline tuberculoid leprosy



Figure 1.



Figure 2.

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and slit skin smear was negative. He was started on MB MDT and continued for 1 year duration without any improvement. Later, biopsy was repeated which revealed granulomatous inflammation with fungal bodies suggestive of histoplasmosis (Figure 3 and 4). Direct microscopy was positive for small budding yeast cells and the sample was cultured on sabouraud dextrose agar supplemented with chloramphenicol.

After two weeks of incubation 1-2 cm diameter, white cottony filamentous growth was observed on agar incubated in 26°C (Figure 5). The tease mount of

the growth revealed hyaline, septate fungal filaments and macroconidia with tubercles (Figure 6). It was sub cultured on blood brain heart infusion (BHI) agar and BHI broth and incubated at 37°C to observe thermophilic dimorphism. After 7 days of incubation yeast like growth was observed and the isolate was confirmed as *Histoplasma capsulatum*. Chest X ray was normal. VDRL and HIV serology were negative. He was commenced on oral itraconazole 100mg three times a day for 2 months and complete resolution of skin lesions were observed.

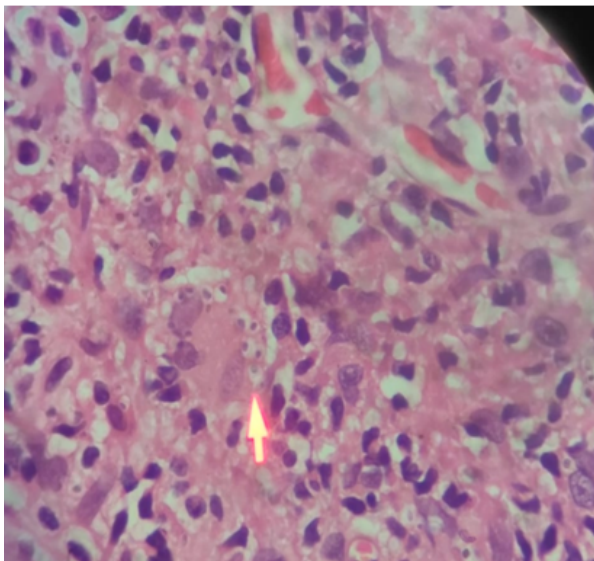


Figure 3. H & E stain.

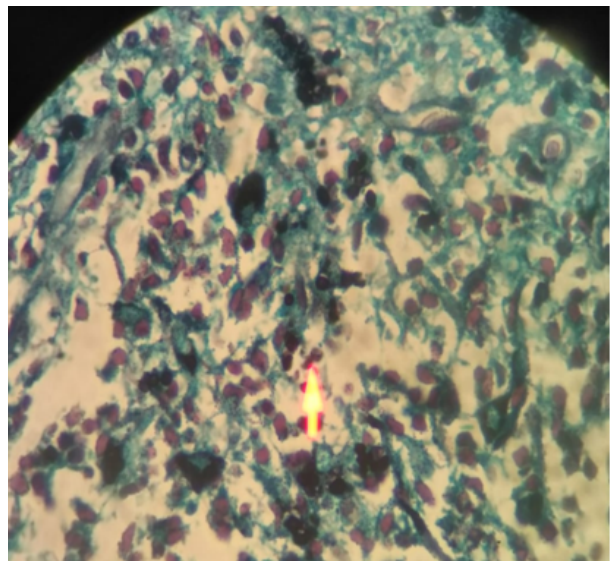


Figure 4. Grocott stain.



Figure 5.

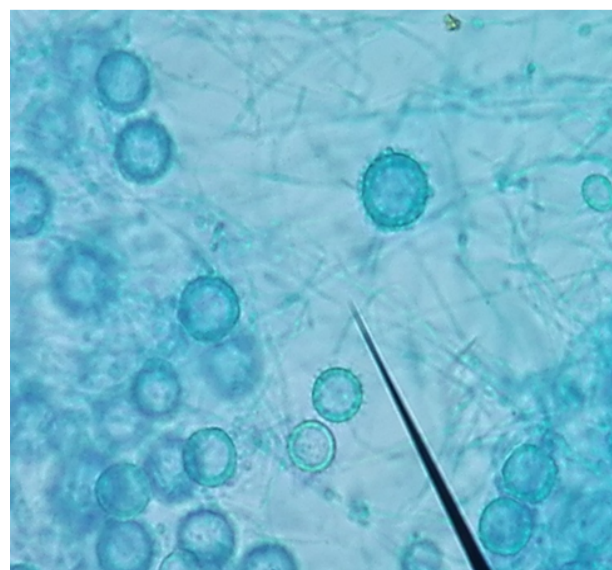


Figure 6.

Conclusion

Histology and fungal cultures of biopsy samples are the gold standard for the diagnosis of histoplasmosis. Histoplasmosis is possibly under-reported in Sri Lanka due to its uncommon presentations. Detailed history and repeated biopsy of non-healing chronic lesions may help in diagnosis. Cutaneous histoplasmosis alone is a rare finding. Therefore the patient has to be longitudinally followed up in the future.

References

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