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CASE REPORT/CAS CLINIQUE

Histoplasmosis presenting as laryngeal ulcer in a post-renal transplant male: An unusual case from India

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Summary Histoplasmosis has variable clinical presentation that mimics various benign and malignant lesions. It is more often associated with pulmonary lesions and disseminated form of disease. Herein, we report a rare case of localized laryngeal histoplasmosis in a 62-year-old Indian man who presented with hoarseness of voice and dysphagia. Post-renal transplant, he was on immunosuppressive drugs for last three years. Laryngoscopy revealed an ulceroproliferative growth at base of tongue, which was extending upto the pyriform fossa. Histopathology of laryngeal biopsy revealed numerous intracellular fungal yeast forms of *Histoplasma* that were subsequently confirmed serologically. The patient was put on oral itraconazole therapy and he responded well to the treatment with complete resolution of the disease. Early diagnosis and management of patient helps in preventing dissemination of the disease.

Introduction

Histoplasmosis is granulomatous disease caused by dimorphic fungus *Histoplasma capsulatum* [15]. It usually occurs by inhalation of dust particles from soil that is contaminated with bird or bat droppings [17]. It exists in soil in mycelial form but converts to yeast form when exposed to higher temperatures in human body [16]. Histoplasmosis may cause varied symptoms but the disease affects primarily lung. Involvement of larynx is usually secondary in cases of disseminated histoplasmosis [18]. Localized laryngeal involvement has been rarely documented in literature.

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Case report

A 62-year-old Indian man presented with history of hoarseness of voice since 1 month, dysphagia for 15 days and weakness in right upper limb since 2 days. He had a history of renal transplant performed for chronic kidney disease with small shrunken right kidney 3 years back. He was incidentally diagnosed to have hepatitis B infection past 2 years. He also had history of stroke, ischaemic heart disease and underwent percutaneous transluminal coronary angioplasty 10 years ago. Presently he didn't have any complaints of fever, cough, weight loss or respiratory distress. He was taking immunosuppressive medication tacrolimus and mycophenolate for last 3 years and was on anticoagulant therapy ecosprin and simvastatin for last 10 years.

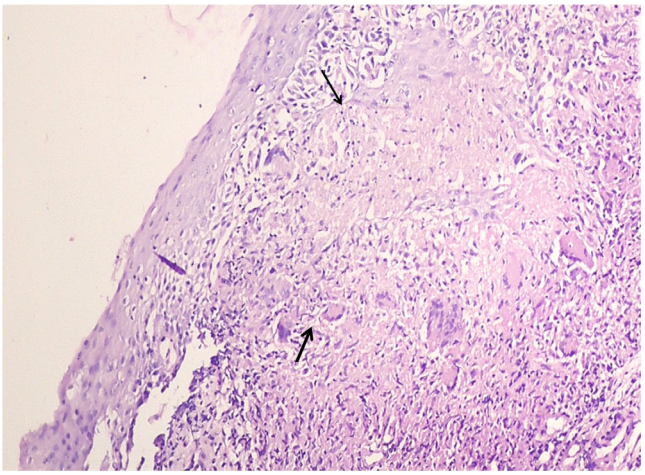

Figure 1 Low power photomicrograph showing covering by stratified squamous epithelium. Sub-epithelial region shows presence of ill-formed granulomas with necrosis (thin arrow) and numerous foreign body giant cells (thick arrow) (Hematoxylin and eosin; original magnification X 200).

Investigation

On physical examination, there was no lymphadenopathy or hepatosplenomegaly and buccal cavity appeared normal. Chest radiograph revealed normal lung fields and abdominal ultrasound did not reveal any other organ involvement. Laboratory investigations showed hemoglobin 15.5 g/dL, platelet count 260,000 per mm^3 and TLC 9500 per mm^3. His serological investigations were largely within normal range except for deranged renal profile including raised serum urea, creatinine and serum potassium levels. He was seronegative for HIV1 and HIV2 antibodies. Laryngoscopy revealed an ulceroproliferative growth involving the epiglottis and extending upto right pyriform fossa. Mobility of bilateral vocal cords was normal but epiglottis was immobile. With the clinical diagnosis of laryngeal neoplasm, biopsies were taken from epiglottis and pyriform fossa.

Histopathological examination revealed mucosal fragments showing focal ulceration. Several ill formed confluent granulomas with foci of necrosis were observed. Many foreign body giant cells and inflammatory infiltrate comprising of histiocytes and lymphocytes were noted (Fig. 1). Several histiocytes demonstrated the presence of intracellular fungal organisms showing prominent peripheral halo. These intracellular structures stained positive for Periodic acid—Schiff and Gomori methenamine silver stain and measured about 2—4 μm with narrow base budding (Fig. 2A and B). No fungal hyphae were identifiable. Mucicarmine, Gram and Fontana masson stains were negative. Morphological features supported diagnosis of *Histoplasma* yeast forms. Blood cultures were drawn and these were negative for bacterial and fungal pathogen. Immunodiffusion test for *Histoplasma capsulatum* test was positive for M band.

There was no evidence of primary or secondary neoplastic process. Patient was treated with itraconazole 200 mg once daily. His symptoms resolved significantly within 2—3 weeks after initiation of therapy. He continued his treatment for 6 months and has been asymptomatic thereafter.

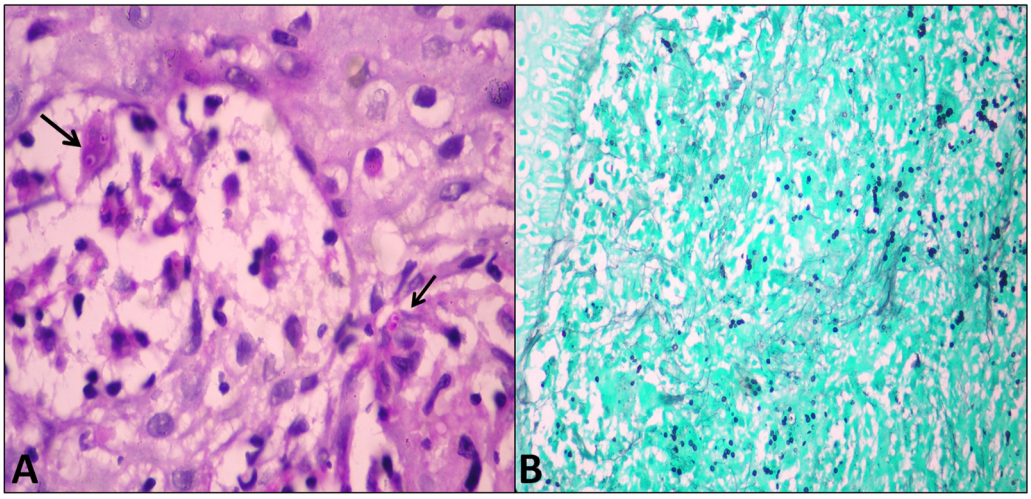

Figure 2 A. High power photomicrograph shows presence of intracellular microorganisms in histiocytic cells with peripheral halos that are accentuated by periodic acid Schiff stain (oil immersion, original magnification X 1000). B. Photomicrograph showing *Histoplasma* organisms that are highlighted by Gomori methenamine silver stain (oil immersion, original magnification X 400).

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