

DISCUSSION

Histoplasma capsulatum is a dimorphic fungus that assumes a yeast form, about 1-4 microns in diameter, in the host tissue. It is found chiefly in warm humid environment that contains bird and bat excreta, and soil high in nitrogen content ⁶. Although *Histoplasma capsulatum* is endemic, sporadic cases have been reported throughout the world.

Humidity and soil characters ^{7,8} have been attributed for its endemic distribution. Padhye *et al.*, suggested that histoplasmosis in Indians tends to occur primarily in the extrapulmonary sites, particularly in the oral cavity ⁷. Clinically it can take an acute pulmonary, a chronic pulmonary or a disseminated form ⁹. Oral lesions of the disease manifest rarely. When present, they occur in association with the disseminated form or sometimes as a localized lesion, which could be the initial ^{7,10} or the only manifestation of the disease ⁷⁻¹¹. The commonly involved sites in the oral cavity are tongue, hard and soft palate, buccal mucosa, gingiva, and lips ⁶⁻¹⁰. According to Goodwin *et al.*, the oropharyngeal lesions are frequently the initial presentation of the disease, especially in the disseminated form ⁷. Reddy *et al.* (1970), reported that all the patients who presented initially with oral lesions, subsequently developed disseminated disease ⁷. Thus suggesting the need for a periodic evaluation of patients with localized oral histoplasmosis, for any systemic involvement. Oral lesions can manifest as papular, ulcerative, nodular, vegetative, furunculoid, granulomatous, or plaque-like lesions, with the most common presentation being a shallow or deep infiltrated ulceration with a pseudomembrane ⁶⁻¹⁰. Gingival manifestations include ulcerative and painful granulomatous lesions. Sore throat, hoarseness of voice, and dysphagia can also manifest ⁸.

Histoplasmosis can be diagnosed based on clinical signs and symptoms, histopathology, cultures, serologic test, including compliment fixation test, immunodiffusion, and histoplasmin skin test. Diagnosis by fungal culture provides the strongest evidence of infection, but that is useful in progressive, disseminated, or chronic pulmonary histoplasmosis, rather than in the initial cases. Histopathology is the prime investigative modality, as identification of *Histoplasma* organism in the sections provides conclusive evidence of the disease ⁹. Serologic tests have limited value in HIV patients because of diminished antibody production. Histoplasmin skin test is of limited value, as the reagents are no longer available. Additionally, a positive histoplasmin skin test boosts antibody levels, compromising the interpretation of serologic tests. Direct immunofluorescence is diagnostic in case of HIV patients ¹².

The consistently rising incidence of histoplasmosis in India and other parts of Asia is quiet alarming. As the disease is the second most common opportunistic infection associated with HIV, and is one of the AIDS defining diseases ¹⁰, it should be considered in the differential