Letters in Response to Previous Publication

There is more to the "intracellular yeasts" than meets the eye

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Sir,

We read with interest the article by Sondhi *et al.*[1] regarding a case of disseminated histoplasmosis in a 69-year-old man with the involvement of the face and larynx. The basic tool for establishing the diagnosis was a histopathological examination of the tissue. As per our classic teaching in mycology, intracellular yeasts ranging in size between 2–4 µ, may be seen in histoplasmosis, talaromycosis (with transverse septum), a small variant of blastomycosis, rarely cryptococcosis and *Candida glabrata*. The clinical picture in all these may vary.

However, recently a new dimorphic fungus, *Emergomyces* spp., has been described that has clinical features and histopathological characters (yeast cells with narrow-based budding) similar to histoplasmosis.[2] *Emergomyces* belongs to the larger family of thermally dimorphic fungi Ajellomycetaceae (Onygenales). The genus *Emergomyces* contains *Es. africanus*, *Es. europaeus*, *Es. canadensis*, *Es. orientalis*, and *Es. pasteurianus*. *Es. africanus* may present with localized cutaneous lesions (papules, nodules, ulcers) or pulmonary manifestations (chest X-ray abnormalities like diffuse reticulonodular disease, consolidation, effusions and/or lymphadenopathy), which are most common, while gastrointestinal tract, liver, lymph nodes and bone marrow are less commonly involved.[3] All reported cases of other species have involved disseminated disease. Whether localized or disseminated, emergomycosis is almost always seen in immunocompromised patients (HIV infection, solid organ transplantation, hematological malignancies, immunosuppressant therapy)[3]

Since 2016, two cases of emergomycosis have been reported from India.[4] It is also interesting to note that since it was first described, HIV-associated emergomycosis has become the most common endemic mycosis in South Africa.[4]

Therefore, for a complete understanding of the epidemiology of endemic mycosis, it is advisable to identify all intracellular yeasts by sequencing the internal transcribed spacer region of rDNA, beta-tubulin, actin and intein pre-mRNA-processing-splicing factor 8 (PRP8).

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There are no conflicts of interest.

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References

1. Sondhi P, Singh S, Khandpur S, Agarwal S. A case of disseminated histoplasmosis presenting with facial and laryngeal involvement. Indian J Dermatol Venereol Leprol 2020;86:470.
2. Govender NP, Grayson W. Emergomycosis (*Emergomyces africanus*) in advanced HIV disease. Dermatopathology (Basel) 2019;6:63-9.
3. Schwartz IS, Govender NP, Sigler L, Jiang Y, Maphanga TG, Toplis B, *et al.* Emergomyces: The global rise of new dimorphic fungal pathogens. PLoS Pathog 2019;15:e1007977.
4. Capoor MR, Mishra N, Kolte S, Singla G, Gogna A, Rudramurthy S, *et al*. Disseminated *Emergomyces pasteurianus* infection in India: A case report and a review. Mycopathologia 2020;185:193-200.

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