

## Clinical Image

# Disseminated Sporotrichosis as the Initial Presentation of AIDS

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## CLINICAL IMAGE

A 38-year-old man was admitted to our hospital with 3-month history of fever, asthenia and profound weight loss. In addition, he complained of multiple skin lesions, which started initially as papules and progress to ulcers. He reported a history of cat bite in his arm. Physical examination was notable for numerous skin nodular lesions; the majority of them ulcerated, throughout his body, especially on trunk, back and lower limbs (Figure 1 and 2). Nasal inspection revealed septum ulcer and partial destruction.

Laboratory exams showed positive reaction to HIV (CD4<sup>+</sup> count and viral load were 50 cells/ul and 281.994 copies, respectively). Subsequently, combination antiretroviral therapy

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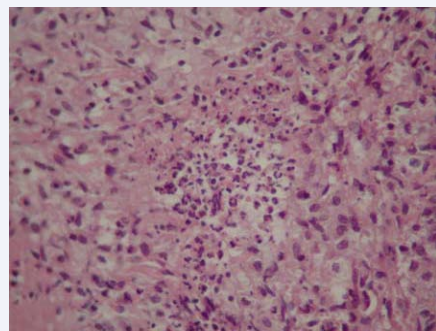
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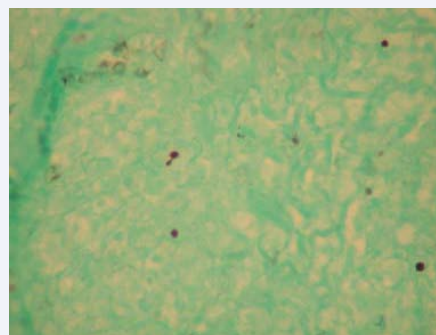
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**Figure 3** Suppurative granuloma filled with plasma cells, epithelioid cells and lymphocytes (H&E stain, 100x).



**Figure 1** Multiple ulcerated crusted round lesions on trunk.



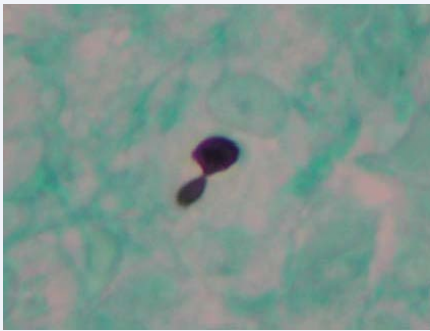
**Figure 4** Numerous rounded and cigar shaped budding yeasts (Gomori-Grocott stain, 20x).



**Figure 2** Two ulcers in the inner aspect of left lower leg; the largest measure 5x8 cm.

was started with Tenofovir, Lamivudine and Efavirenz. A 4-mm abdomen skin's punch biopsy was obtained and demonstrated diffuse suppurative granulomatous dermatitis with giant cells, epithelioid cells, plasma cells and lymphocytes (Figure 3). PAS and Gomori-Grocott stains revealed rounded and elongated cigar-shaped elliptical yeast structures (Figure 4 and 5). Biopsy of nasal septum ulcer grew *Sporothrixschenckii* on Sabouraud dextrose agar medium, confirming the diagnosis of sporotrichosis.

Amphotericin B deoxycholate (2.5 g, total dose) was initiated for 2-weeks, followed by Itraconazol (200 mg/day) for 6 months with clinical improvement. Maintenance therapy with Itraconazol was planned until patient immunological status improved (i.e. CD4<sup>+</sup> > 200 cells/ul).



**Figure 5** Cigar-shaped yeast cell (Gomori-Grocott stain, 100x).

Sporotrichosis is the most prevalent mycosis in South America, caused by the dimorphic fungus –*Sporothrix* complex –which included four distinct species: *S. globosa*, *S. brasiliensis*, *S. Mexicana* and *S. schenckii*. [1]. Although it is classically described as associated with traumatic inoculation from soil, vegetables and organic matter contaminated with *S.* species, zoonotic transmission has also been reported [2]. Since 1998, a cat-transmitted Sporotrichosis epidemic has emerged in

Rio de Janeiro, Brazil [3]. Remarkably, the majority of HIV-infected patients presented with disseminated form, involving skin, mucosa, bone or meninges [4]. In endemic countries, Sporotrichosis should be considered as an opportunistic infection, requiring the inclusion of this disease in differential diagnosis of skin lesions in AIDS patients.

## REFERENCES

1. Marimon R, Cano J, Gene J, Sutton DA, Kawasaki M, et al. *Sporothrix brasiliensis*, *S. globosa* and *S. Mexicana*, three new *Sporothrix* species of clinical interest. *J Clin Microb.* 2007; 45: 3198-3106.
2. Schubach A, Barros MBL, Wanke B. Epidemic sporotrichosis. *Curr Opin Infect Dis.* 2008; 21:129-133.
3. Barros MBL, Schubach Ade O, do Valle AC, Gutierrez Galhardo MC, Conceicao-Silva F, Schubach TM, et al. Cat-transmitted sporotrichosis epidemic in Rio de Janeiro, Brazil: description of a series of cases. *Clin Infect Dis.* 2004; 38:529-535.
4. Freitas DF, de Siqueira Hoagland B, do Valle AC, Fraga BB, de Barros MB, de Oliveira Schubach A, et al. Sporotrichosis in HIV-infected patients: report of 21 cases of endemic sporotrichosis in Rio de Janeiro, Brazil. *Med Mycol.* 2012; 50: 170-178.

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