



Images in Infectious Diseases/Imagens em DIP

Can yeast-like form of *Sporothrix schenckii* confuse the direct parasitological diagnosis of American cutaneous leishmaniasis?

Estruturas leveduriformes de *Sporothrix schenckii* podem gerar confusão no diagnóstico parasitológico direto da leishmaniose tegumentar americana?

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A 44 year-old HIV-positive male patient with ulcerated lesions in the palate, third left toe and right thigh (**Figure A**) was treated at the Leishmaniasis Clinic of the Evandro Chagas Clinical Research Institute, Oswaldo Cruz Foundation (IPEC/FIOCRUZ) for diagnostic investigation. A biopsy of the thigh and palate lesion was performed for culture isolation of *Leishmania*, fungi and mycobacteria, while for direct examination, scarification and imprint slides were prepared with material from the thigh lesion. Following fixation by methanol and Giemsa staining, scarification and imprint slides of the thigh lesion were examined under a light microscope with an immersion objective (x 1.000). Analysis revealed the presence of numerous rounded and ellipsoid structures located inside and outside macrophages (**Figure B**). Although these structures are similar to amastigotes in size and shape, they presented no kinetoplast, which is a key feature for *Leishmania* parasite confirmation. The mycological culture of fragments of the palate and thigh lesion was positive for *Sporothrix schenckii*.

In the State of Rio de Janeiro, both sporotrichosis and American tegumentary leishmaniasis (ATL) occur in overlapping areas. This affects different animal species, including man, and is a confounding factor in the diagnosis (clinical and laboratory) of both diseases. In the present study, probably due to the HIV infection, numerous structures of yeast-like form of *S. schenckii* were observed. The presence of such structures in the direct examination is a rare event; however, they indicate the need for skilled professionals and thorough analyses of direct examinations, taking into account the morphological features specific to the parasite, in order to adequately diagnose the case.

REFERENCES

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