

Natureza do trabalho: Resumo

TÍTULO

RECOGNITION AND MANAGEMENT OF NEUROCRYPTOCOCCOSIS IN PATIENT WITH SIDA

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RESUMO

Introduction: There are about 37 million people living with HIV/AIDS (PLWH) in the world. In countries which prevalence is high and the treatment suffers high dropout rates, arises more one challenge, the high rates of opportunistic infection (OI)⁴. These, the cryptococcosis is considered the systemic mycosis more frequent in PLWH and the third more common reason of OI of central nervous system (CNS)¹. It is caused mainly by *Cryptococcus neoformans* that present five serotypes, being the A and D the major causative of human infection and 90% occurs in immunocompromised people³. **Objective:** To discuss about the precocious recognition of neurocryptococcosis and its treatment in PLWH. **Methodology:** A literature review was performed using the Pubmed, Scielo and Lillacs. **Discussion:** The cryptococcosis has decreased after the beginning of antiretroviral treatment. However, it is still considered important because of its morbidity and mortality (6). In immunocompromised patients, it causes meningo-encephalitis, usually acute, with nonspecific manifestations, mainly, in males. The cryptococcal meningitis has to be considered in PLWH with headache, unexplained fever, progressive dementia and mental confusion. The initial management consists of clinical and accurate neurological exam (8). Of laboratory tests, there are three methods for antigen detection: latex agglutination, enzyme immunoassays and lateral flow test (CrAg), a rapid test that can be used with serum, CSF and urine - now considered a useful screening in the diagnosis of cryptococcosis in PLWH. The cryptococcal antigen in CSF has the best performance (97,8%). The cytochemical exam of CSF could show regular cellularity associated with high fungal load. The urine culture, with 71,6% of yield, is easy to obtain, low biological risk and cost (1). The culture is the 'gold standard' test to diagnostic with 90% of sensitivity, besides to be a parameter for the treatment. The straight exam with China paint may be positive in 80% of PLWH (6). The image exams are normal in a half of the cases, in the remainder the exam could reveal hydrocephalus, atrophy and vasculitis(8). In Brazil, the neurocryptococcosis treatment is done with Amphotericin B and Fluconazole and is compound by three phases: the induction phase, to reduce the fungal load, for two to four weeks; the consolidation phase, to normalize clinical and laboratory parameters; and the maintenance phase, to secondary prevention, for six months at least (6). The Fluconazole has been better in this last phase. Furthermore, Amphotericin B deoxycholate may be replaced by liposomal, this presents less side effects (7). The prophylaxis used with fluconazole may be pointed as one of factors responsible for the increase of minimum inhibitory concentration in vivo, though the proper penetration of this drug in the CSF support the good results noted in vivo (5). **Conclusion:** Then, the cryptococcosis has been relevant because it is considered one of the main OI associated with AIDS, as well as cause serious CNS injury resulting in high mortality. Therefore, it is necessary to recognize its neurocryptococcosis way to establish diagnosis and early treatment to slow the progression of the disease.

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References

1. PINTO JUNIOR, V.L et al. Cryptococcosis associated with AIDS. The importance of the cultivation of urine in diagnosis. *Journal of the Brazilian Society of Tropical Medicine* 39(2):230-232, mar-abr, 2006.
2. FERNANDES, O.F.L et al. *Cryptococcus neoformans* isolates from patients with AIDS. *Journal of the Brazilian Society of Tropical Medicine* 33(1):75-78, jan-fev, 2000.
3. MOREIRA, T.A et al. Cryptococcosis: Clinical - epidemiological, laboratory and fungus varieties study in 96 patients . *Journal of the Brazilian Society of Tropical Medicine* 39(3):255-258, mai-jun, 2006.
4. PARK, B.J et al. Estimation of the current global burden of cryptococcal meningitis among persons living with HIV/AIDS. *AIDS* 23:525–530, 2009.
5. FAVALESSA, O.C et al. First description of the phenotypic characterization and in vitro susceptibility to drug of *Cryptococcus* spp yeasts isolated from positive and HIV-negative patients , State of Mato Grosso. *Journal of the Brazilian Society of Tropical Medicine* 42(6):661-665, nov-dez, 2009.
6. Pappalardo, M.C.S.M . Pharmacokinetic and pharmacodynamic parameters of amphotericin B and fluconazole and its contribution to the study of clinical-laboratory correlation of cryptococcosis of the central nervous system associated with AIDS. São Paulo 2009.
7. Rocha J.A et al. Clinical Guidelines for the Management of Cryptococcal meningitis in HIV patient. Infectious and Parasitic Diseases Service of the University Hospital Clementino Fraga Filho - Federal University of Rio de Janeiro.
8. Consensus on cryptococcosis - 2008 *Journal of the Brazilian Society of Tropical Medicine* 41(5):524-544, set-out, 2008.