

# Entamoeba histolytica or Entamoeba histolytica/E. dispar

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#### Dear Editor,

In Vol.5, No.2, 2012, Jundishapur Journal of Microbiology a paper entitled "A study on prevalence of gastrointestinal parasitic infections in HIV (+) patients referred to Ahvaz Razi Hospital in 2008-2009" was published. We are grateful to Dr Yosefi *et al.* for his effective paper in this journal. We read this manuscript with a great interest but there is one point that should be taken into consideration. In the paper it has been claimed that one of HIV positive patient 1.7% was infected with Entamoeba *histolytica* cyst (1). We would like to discuss on this topic. It is now known that the parasite previously named as E. histolytica actually consists of two morphologically identical but genetically distinct species, one E. histolyti*ca*, which is the causative organism of invasive intestinal and extra-intestinal amoebiasis. The other is *E. dispar*, a non-pathogenic intestinal commensally protozoan organism (2). Differential diagnosis of *E. histolytica* and *E.* dispar in stool samples is not easy on the basis of microscopy alone, except for the case of hematophagous trophozoites in acute dysentery. Currently, some expensive methods such as amoebic antigen and DNA detection, isoenzyme electerophoretic pattern, PCR-basis methods, are available to differentiate both nonpathogenic E. dispar from pathogenic E. histolytica, especially in cyst passer person (3, 4). An expert consultation of WHO on

amoebiasis in Mexico City stressed needs for improved methods for the specific diagnosis of *E. histolytica* infections based on technologies appropriate for use in developing world (5). Also, This meeting recommended that when diagnosis is made by light microscopy, the cysts of two species are indistinguishable and should be reported as *E. histolytica / E. dispar*. Because in this paper differential diagnosis was not done on this cases and diagnosis was done with routine microscopy method, it is better than as other recent studies in Iran, this change to "one of HIV positive patient 1.7% was infected with *E. histolytica /E.dispar* cyst.

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