Isolation of *Cryptosporidium meleagridis* in a HIV- Positive Female- the First Report from Poland

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Background: *Cryptosporidium* is a protozoan parasite invading a wide range of vertebrates including humans. It can cause cryptosporidiosis with chronic diarrhea and can be life threatening in immunocompromised patients, particularly in individuals with low CD4 T cell count. We present an infection of *Cryptosporidium meleagridis* in a HIV positive female. Material and Methods: A 39-year-old woman suffering from water diarrhea for eight months, with CD4 T cell 15 cells/μl. DNA was isolated from her stool. Three fragments of nuclear DNA were amplified and sequenced: a part of the gene that codifies for the variable region of the small subunit of the ribosomal RNA (SSU rRNA) as well as two parts of the gene that codifies for the C-terminal and N-terminal portions of the oocyst wall protein (COWP)

Results: The lenghts of PCR products obtained were approximately 435, 580 and 550 base pairs, respectively (data not shown). The comparison of obtained sequences with data from GenBank showed that isolate was *Cryptosporidium meleagridis*. The sequence of the analyzed fragment of SSU rRNA, as well as the sequence of the fragment of the gene that codifies for N-terminal portion of COWP protein were in 100% agreement with the similar sequences of *Cryptosporidium meleagridis* which have already been deposited in GenBank. The sequence of the second fragment of the gene COWP was similar in 95% to the analogical sequence of *C. parvum*, *C. hominis* and *C. wrairi*. Data analysis from GenBank showed that the sequence of this fragment of the gene COWP in *C. meleagridis* has not been earlier deposited. The sequences have been deposited in GenBank under accession numbers EU284595 and EU310392.

Conclusion: This is the first isolation of *C. meleagridis* in HIV-1 infected patient in Poland.

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Evaluation of Cerebrospinal Fluid (CSF) in Patients with HIV/Syphilis Co-Infection Followed at Institute of Infectology Emilio Ribas, Brazil

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Background: Sexually transmitted diseases (STDs) among HIV-infected patients are a huge public health challenge in the world. Co-infection HIV/syphilis may be responsible for an acellerated and fulminant course of syphilis, including neurosyphilis. The aim fo this research was to assess the prevalence of neurosyphilis in co-infected patients and analyse their clinical situation.

Methods: From January 2007 to December 2007, a total of 861 examination of cerebrospinal fluid (CSF) was performed at Clinical Laboratory from Institute of Infectology Emílio Ribas, São Paulo city. Of these 861 patients, 21 were reactive for neuroshyphilis and for HIV. Retrospective analysis of clinical records and laboratory findings of these co-infected patients were carried out. Syphilis serology was performed on both CSF and serum (VDRL and TPHA assays). Neurosyphilis was defined by positive TPHA test in CSF

Results: Overall prevalence of neurosyphilis was 2.34%. Clinical data of 21 co-infected patients were analyzed. 15 males (71.42%) and 6 females (28,57%). Median age was 42 years. Mean CD_4 cout was 324 cells/μL (range: 34—940). 11 (52.38%) patients were using HAART and 1 patient had stopped ARV therapy. Eight (38%) patients showed clinical manifestations of secondary syphilis. Neurological symptoms were observed in 7 (33.3%) patients. Mean CSF VDRL was 1:4 (range: negative-1:8); mean CSF TPHA was 1:117 (range: 1:40—1:640); mean CSF cell count was 49 (range: 1—400); mean CSF protein concentration was 87 (range: 31—439); mean CSF glucose concentration was 52 (range: 17—61). In all patients, positive VDRL in serum was detected in routine screening test and confirmed by haemagglutination assay.

Conclusion: Many countries are observing re-emergence of STDs, including Brazil. In our hospital neurosyphilis is more common in male patients with HIV infection. A significative number of patients had dermatological symptoms. During the course of HIV infection the natural course of syphilis can be modified - syphilis could contribute to brain barrier injury. Improved information and targeted education programs mut be improvement, to avoid delayed syphilis recognition.

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