UMP. 628

Parenteral Ivermectin for veterinary use. Treatment of severe hyperinfestation by Strongyloides stercolaris? Case report

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Background: The hyperinfestation by Strongyloides stercolaris is a general syndrome with high morbidity and mortality, which usually occurs in patients with immunological compromise or in corticosteroid treatments. In critical patients with paralytic intestinal ileus, the decrease in the bioavailability of oral ivermectin leads to therapeutic failure. The use of Ivermectin parenteral veterinary use is an extreme resource in patients with paralytic ileus secondary to hyperinflation by Strongyloides stercoralis. (SHSS)

Methods & Materials: Retrospective and observational study. Clinical records of patients diagnosed with hyperinfestation by Strongyloides stercolaris, from January 2012 to August 2017, were evaluated in a sanatorium in the City of Buenos Aires. Inclusion criteria: positive culture (fecal matter, sputum, BAL) for Strongyloides stercoralis and diagnosis of intestinal ileus. The following variables were analyzed: sex, median age, nationality, residence, immunological commitment, corticotherapy, clinical and laboratory manifestations, days of hospitalization, stay in the ICU, treatment (enteral and parenteral), clinical resolution and mortality.

Results: Of the 5 patients with inclusion criteria, the following were determined: Median age of 49.2 years; 2 foreigners (Peru and Bolivia); 4 residents of the Province of Buenos Aires and one of CABA. 2 with immunological compromise (HIV, DBT and kidney transplant); all 5 received corticotherapy. Clinical manifestations: all patients presented paralytic intestinal ileus with respiratory compromise, one presented rash and 4 had eosinophilia. The treatment started with oral Ivermectin but in the face of failure all received subcutaneous ivermectin as a last option. The 5 patients had a stay in the ICU, 4 with satisfactory clinical resolution and one death.

Conclusion: Strongyloid hyperinflation syndrome is always a serious condition that can be manifested by respiratory distress, sepsis, meningitis or intestinal ileus. In this last presentation, the impossibility of digestive absorption of drugs makes it the only therapeutic option to use parenteral Ivermectin in the face of failure of the oral or rectal route. Our patients were immunosuppressed or had received corticosteroids, but they did not come from endemic areas. We emphasize the importance of the diagnosis prior to immunosuppression and the performance of the culture as a screening.

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UMP. 629

Molecular evaluation of Chagas disease reactivation and treatment follow-up in HIV coinfected patients

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Background: Chagas disease reactivation is an AIDS defined illness that usually affects Central Nervous System. Gold-Standard diagnosis for *T.cruzi* reactivation is based on microscopical observation methods.

Methods & Materials: Seven patients with HIV/AIDS diagnosis, *T.cruzi* serological findings, neurological disorders, and suspected of Chagas disease reactivation were included between 2015–2017 from two health centers of Buenos Aires, Argentina. Real-time PCRs (qPCR) against *T.cruzi* satellite DNA were carried out from cerebrospinal fluid (CSF) and peripheral blood samples (BS) for parasite load quantification. Molecular parasite characterization was based on amplification of spliced leader intergenic region, 24 srDNA, and A10 polymorphic sequences.

Results: Patients were aged from 41 to 69 years old, 43% were women, CD4+ T cell counts were between 7 and 53 cell/mm^3. All of them received tripanocidal treatment (TrypT).

Five CSFs were withdrawn before TrypT starting. Two had microscopical detection of trypomastigote forms (MDTryp) and quantification over 500 p.e/mL by qPCR. The other 3 CSF samples were non-detectable by both methods. The remaining two patients CSF were obtained after starting TrypT with MDTryp negative findings but qPCR positive results with parasite burden below 13 p.e/mL.

Among the 3 patients with negative CSF findings, 2 had positive MDTryp on BS with 119 and 3512 p.e/mL. The third was negative by MDTryp and had 2 p.e/mL before TrypT.

All patients had qPCR positive findings on BS (2 -1426 p.e/mL) and decreased their parasitic loads during TrypT.

All characterized parasites from BS and CSF samples belonged to DTU (Discrete Typing Unit) II, V or VI, frequently found in Southern Cone region.

Out of this small series, 4 patients died: 2 because of brain "Chagoma", 1 due to status epilepticus and 1 due to acute abdomen. Two of the 3 survivors were those with negative CSF findings for both methods.

Conclusion: Chagas disease reactivation occurred on deep inmunosupressed HIV people. Its diagnosis by MDTryp and qPCR is complementary. qPCR detected *T.cruzi* DNA on negative MDTryp findings even during treatment. TrypT always reduces *T.cruzi* DNA loads. qPCR might be an useful therapeutical marker.

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