Neurological harmfulness because of antimonial treatment for stubborn instinctive leishmaniasis

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Introduction
Although pentavalent antimonials are no longer considered the first-line therapy for visceral leishmaniasis in the developed world, they are still used in certain geographical areas and in refractory cases. These drugs have a great number of adverse effects; however, neurological toxicity has been rarely reported.

Case report
We present a 56-year-old woman who required long-term treatment with antimonial drugs due to refractory visceral leishmaniasis and presented clinically with tremor of extremities, myoclonus, gait disturbances and epileptic seizures. The EEG showed increased beta rhythms and generalized epileptogenic activity. She had a slow but favorable response after the withdrawal of antimonials and the initiation of anticonvulsant therapy.

Conclusion
Severe but reversible neurological toxicity is a rare adverse effect of prolonged antimonial treatment. More EEG record data are needed to support the suspicion of a possible increase of beta rhythms in this situation. We report the case of a 56-year-old woman diagnosed with visceral leishmaniasis for which she had received two amphotericin-B cycles. Due to persisting symptomatology and positive Leishmania spp. PCR in bone marrow aspirate, the disease was categorized as refractory and thus meglumine antimoniate associated with itraconazol and miltefosine for 15 days was indicated. She then received sodium stibogluconate for additional 14 days. It was decided to continue secondary prophylaxis with meglumine antimoniate. During this period she began to feel fine self-limiting distal hands tremor after receiving the medication.

New positive blood PCR for Leishmania was detected during prophylaxis. She then received successive regimens of liposomal amphotericin B, miltefosine, adjuvant Interferon gamma, paromomycin and two extra cycles of stibogluconate (total cumulative dose of 69000 mg). Along this time course, the tremor progressed hindering basic activities and limiting gait, and a generalized tonic-clonic seizure during a febrile episode occurred.