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Letter to the Editor

Screening for Leishmania specific antibodies among patients with rheumatic diseases treated with biological therapy

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Dear Editor,

We have read with interest the recent Letter to the Editor: "Remembering visceral leishmaniasis as a potential trigger of haemophagocytic lymphohistiocytosis in individuals treated with anti-TNF-alpha therapy" by Nardo-Marino et al.,[1] and we would like to add some comments to the letter.

This letter refers to a case report by Burka et al.[2] describing a Scandinavian male patient developing hemophagocytic lymphohistiocytosis 28 days after the onset of infliximab treatment. The bone marrow examination revealed the presence of Leishmania amastiotes, which was a quite surprising finding, because the patient did not have any recent travel history to leishmaniasis-endemic areas at the onset of the symptoms and had never traveled to any endemic areas outside of Europe.

The majority of visceral leishmaniasis (VL) cases worldwide occur in endemic areas of Brazil, Nepal, India, and in some East African countries. In Europe, the parasitic disease is seen in the Mediterranean region.[3] As highlighted by Nardo-Marino et al.,[1] VL progression induced by biologic therapy has been reported on several occasions among patients from VL endemic areas.

We have recently conducted a travel questionnaire survey among arthritis patients treated with biologics in our out-patient clinic.[4] A total of 273 patients completed the questionnaire. A history of traveling to different countries in the Mediterranean region was reported by 13%, including Portugal, Spain, Italy, Greece, and Turkey. Each of these countries is known to be endemic to the Leishmania parasite.

To investigate if the latent leishmaniasis infection was present among arthritis patients receiving biologics, we conducted also a cross-sectional leishmania antibody survey in our clinic. Blood samples from 342 patients were tested for leishmania IgG antibodies by ELISA. None of the samples had tested positive. Although blood samples from four (1%) patients came out with an undetermined result by ELISA, none of them had been confirmed positive by western blot assay.[5]

In conclusion, we agree with Nardo-Marino et al.[1] that clinicians should be aware of the potential risk of latent Leishmania infection in patients treated with biologics. Apart from areas in the Mediterranean region, antibody screening prior to initiation of treatment seems to not be justified in most part of Europe. However, this situation may change as a result of global climate changes, which can lead to further geographical expansion of the sand fly-borne transmission of leishmaniasis in Europe. Moreover, an increasing number of immigrants, many from leishmaniasis-endemic countries are traveling to Europe during this time in search for permanent residence. As a result, leishmaniasis and other parasitic diseases may occur with higher frequency in the European healthcare systems, and in this scenario, screening guidelines for latent leishmania infection may become even more relevant.

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