Leishmaniasis resembling hematological malignancies. *The concern of differential diagnosis.*

To the Editor

I read the interesting article by Niscola et al[1] on leishmaniasis resembling hematological malignancies. The concern of differential diagnosis. Leishmaniasis is a clinically heterogeneous group of diseases, caused by infection with protozoa of the genus Leishmania. The aggressiveness of the individual species, their organ preference, and the host immune status determine disease course. This can range from a solitary, spontaneous healing ulcer (cutaneous leishmaniasis), to often destructive mucocutaneous disease, and generalized involvement with visceral leishmaniasis, which may be lethal if not treated.[2] The authors nicely stated the clinical presentation of a studied series of 6 patients and adopted a sound, sequential panel of laboratory tests to settle the diagnosis. I have 3 comments considering the aforementioned study. First, the infected patient with visceral leishmaniasis often represents a diagnostic challenge particularly when the patient is living in a non-endemic region, as leishmaniasis might mimic various diseases, in particular hematological malignancies.[3-6] Four different types of association between leishmaniasis and malignancy were established: 1. Leishmaniasis mimicking a malignant disorder, such as lymphoma. 2. Leishmaniasis arising as a difficulty to diagnose and treat infection among patients receiving chemotherapy for various malignant disorders. 3. Simultaneous diagnosis of leishmaniasis and a neoplastic disorder in the same tissue samples of immunocompromised patients. 4. Direct involvement of *Leishmania spp*. in the pathogenesis and/occurrence of malignant lesions, especially of the skin and mucous membranes.[7] Second, pediatricians and internists must have high index of suspicions to diagnose visceral leishmaniasis in individuals with a constellation of fever, hepatosplenomegaly, lymphadenopathy, and pancytopenia who have resided in endemic areas (Mediterranean countries, India, East Africa, and South America) during the preceding years. In addition, they need to consider the questions of "Where do you live?" and "Where have you been?" when examining patients with diverse clinical signs and symptoms suggestive of visceral leishmaniasis, particularly in countries where leishmaniasis is not an endemic disease. Third, leishmaniasis mimicking hematological malignancies exhibits a therapeutic dilemma in clinical practice, when investigations fail to settle the diagnosis. The Institution of empirical anti-leishamanial therapy and assessing the clinical response might be the sound option to be undertaken in such puzzling situations.

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Reply from the Author

The comments of Prof. Al-Mendalawi on our paper[1] are very interesting and make some important remarks. Our patients represented sporadic cases of leishmaniasis; indeed, they are living in a country where leishmaniasis is not an endemic disease and they have not resided in endemic areas during the preceding years. They were non immunocompromised individuals and presented with a constellation of fever, hepatosplenomegaly, lymphadenopathy, and pancytopenia, so that an underlying hematological malignancy, such as acute leukemias, was suspected. We completely agree with Prof. Al-Mendalawi when he affirms the crucial importance to take into account the residency, and previous travels in the anamnestic and clinical assessment of patients presenting with clinical signs and symptoms suggestive of leishmaniasis, particularly in countries where leishmaniasis is not an endemic disease. In addition, we agree on the opportunity to administer an empirical anti-leishamanial therapy and assessing the clinical response when leishmaniasis is suspected, and a hematological malignancy is excluded by a comprehensive work-up.

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