On cutaneous leishmaniasis and tertian malaria transmitted by migrants

MIGR3

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Introduction. A number of migrants arriving from Asia and Africa pass through the Balkans on their way to Western Europe. Some of them suffer from cutaneous leishmaniasis and recurrent febrile episodes because of tertian malaria /1/. The presence of vectors - flies *Phlebotomus* g.sp. and mosquitoes *Anopheles* g.sp. is a risk factor for local transmission /from April to October/ /2,3/.

Leishmaniosis cutanea. A total of 36 cases of cutaneous leishmaniosis in different clinical forms (single and multiple ulcers) were observed in migrants for a 5-year period. The skin lesions were painless and on the exposed parts of the body /Fig.1. Patients from Syria and Afghanistan/. The patients were in good general condition, without lymphadenitis and changes in CBC. Amastigotes of *Leishmania* spp. were seen only in the specimens from

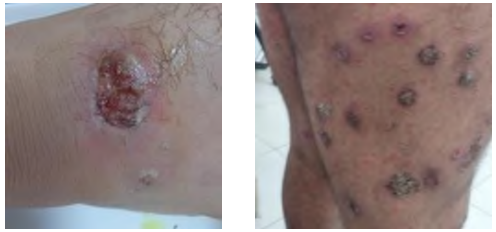

Fig.1. Cutaneous leishmaniosis

secreting ulcers /stained with Giemsa/. The serological results were negative. Fluconasol (0.2 g/daily, for 4 weeks) had good therapeutic effect on the lesions /4/.

Malaria tertiana. A total of 14 patients (aged 12-38 years) with typical malaria paroxysm without prodromes were observed. They were immigrants from Afghanistan, with low social status. They have all already suffered from tertian malaria. In our country they were diagnosed with relapse of malaria. These patients had a fever and splenomegaly -- detected during a physical exam and by ultrasound /Fig.2/. Blood smears /stained with Giemsa/ showed ring forms, 'ameboid' trophozoits and gametocytes of *Plasmodium vivax*. Anaemia occurred in 2 children with HB below 100, in 6 patients it was below 120. All patients were with thrombocytopenia. They were treated with Chloroquine, Primaquine and oral iron supplements. The Afro-Asian strain of *Pl. vivax* is thought to be adaptive to Anopheles mosquitoes in Europe and they to be able to transmit malaria. Immediate detection of asymptomatic parasite carrier and treatment are the main factors for controlling the "import" of malaria /5/.

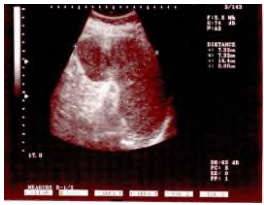

Fig.2. Splenomegaly

References: **1.** Aagaard-Hansen J, Nombela N, Alvar J. Population movement: a key factor in the epidemiology of neglected tropical diseases. Trop. Med. Int. Health 2010; 15 /11/: 1281+8. **2.** Desjeux P. Worldwide increasing risk factors for leishmaniasis. Med Microbiol Immunol 2001; 190 /1-2/: 77-9. **3.** Vutchev D. Tertian malaria outbreak three decades after its eradication. Jpn J Infect Dis, 2001, 54, 2, 79-80. **4.** WHO. Control of the leishmaniases. TRS no. 949. WHO-Geneva, 2011;225. **5**. WHO. Implementation of the global malaria control strategy. TRS no.839. WHO-Geneva, 1993; 58.