Annals of Tropical Medicine and Parasitology

Volume 102, Issue 5, July 2008, Pages 383-390

Clinical manifestations of cutaneous leishmaniasis in Sri Lanka - Possible evidence for genetic susceptibility among the Sinhalese

Samaranayake, T.N.^a, Dissanayake, V.H.W.^b, Fernando, S.D.^a

Department of Parasitology, Faculty of Medicine, University of Colombo, 271 Kynsey Road,
Colombo 8, Sri Lanka

Abstract

Human cutaneous leishmaniasis (CL) caused by Leishmania donovani, a pathogen more usually associated with visceral leishmaniasis, is now endemic in Sri Lanka. This report details the characteristics of 200 patients with locally acquired CL, who were recruited prospectively for an ongoing study into the genetic susceptibility to CL in Sri Lanka. In each case, the CL was confirmed by the demonstration of amastigotes in a direct smear and/or promastigotes in a culture. Although only 82% of the Sri Lankan population is Sinhalese, all 200 patients belonged to this ethnic group. The patients had a median age of 32 years (range54-80 years). Most of them each had a single, non-tender, non-itching and dry lesion which had started as a papule and then gradually enlarged and ulcerated, with changes in the surrounding skin. None of the patients had any signs of systemic disease. Eleven (5.5%) each had at least one other affected family member. Patients with multiple lesions were most likely to be found in families with more than one affected member (P=0.002) but multiple lesions were not associated with diabetes mellitus (P>0.05). Although the results of passive detection under-estimate the true occurrence of a disease, the present data point towards enhanced susceptibility to CL among the Sinhalese and/or certain individuals, possibly determined by genetic factors. © 2008 The Liverpool School of Tropical Medicine.

^b Human Genetics Unit, Faculty of Medicine, University of Colombo, 271 Kynsey Road, Colombo 8, Sri Lanka