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Seroprevalence of *Entamoeba histolytica* Infection in China

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Amebiasis caused by infection with *Entamoeba histolytica* is one of the most problematic parasitic diseases in developing and developed countries. *E. histolytica* infection is also related to diarrhea in patients with HIV infections and AIDS. However, the prevalence of *E. histolytica* and *E. dispar*, which is morphologically indistinguishable from *E. histolytica* but nonpathogenic, is not well known in China. In the present study, seroprevalence of *E. histolytica* infection was examined in healthy individuals. A total of 1,349 serum samples were obtained in Beijing city, Shanghai city, Guangxi province, Guizhou province, Sichuan province, Qinghai province, and Xinjiang province.

Seropositivity to *E. histolytica* was examined by using three methods: ELISA using crude antigen, ELISA using a recombinant fragment of C terminus of intermediate subunit lectin of *E. histolytica* (C-Igl), and indirect fluorescent-antibody test (IFA). Total positive rates evaluated by these methods were 13.9, 6.3 and 2.1%, respectively. Among the 7 areas, positive rates in Guizhou (37.9% in ELISA using crude antigen, 15.3% in ELISA using C-Igl, and 9.5% in IFA) were significantly higher than those in other areas. On the other hand, no positives were found by IFA in samples from Shanghai. These results demonstrate that prevalence of *E. histolytica* infections in China seems to be quite different between urban and rural areas. Further epidemiological study in high-prevalent areas is early requisite for the control of amebiasis in China.

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Clinical Features of Cutaneous Leishmaniasis in Sri Lanka and Molecular Identification of *L. donovani* as the Cause

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Background: Cutaneous leishmaniasis (CL) is a newly established disease in Sri Lanka with over 1500 locally acquired cases reported since year 2001.

Objectives: To study the clinical profile, associated risk factors and genetic analysis of the causative parasite of CL in Sri Lanka.

Methodology: Clinical evaluation was carried out on patients who visited the Department of Parasitology, Faculty of Medicine, Colombo for diagnosis using a pre-tested questionnaire. Light microscopy and/or PCR were performed on lesion material to confirm diagnosis. Formol gel test (FGT) was done on all patients. The causative species was identified by sequencing of the partial 6PGDH gene, followed by microsatellite analysis to study the phylogenetic relationships.

Results: There were 401 patients (78.9% males, out of which 57.4% were soldiers) with at least 549 lesions. Most infections were acquired in Northern (55.7%) or Southern (39.3%) Sri Lanka. Several lesion types were noted: papules 23.4%, nodules 25.4%, ulcerating nodules 19.6%, ulcers 23.7%, plaques 6.4% and other 1.7%. Nodules with 5—9 months duration had the highest parasite positivity (n = 100, 75.5%). Sporotrichoid spread (n = 44, 11.9%), satellite lesions (n = 35, 8.9%) and lymphatic spread (n = 109, 27.7%) were commonly observed. No patients had visceral features and the FGT was negative in all subjects. Male sex, 20—40 years of age and over 5 hours/day spent outdoors were identified as risk factors, but not household clustering. The causative species was identified as *L. donovani*, belonging to a distinct genetic group within that complex.

Conclusions: A derмотrophic variant of *L. donovani* causes cutaneous leishmaniasis in Sri Lanka. The ability of the local Leishmania parasite to visceralize, self heal or develop drug resistance is yet to be determined. In spite of the generally accepted anthropotonic nature of *L. donovani*, in this study favours zoonotic transmission of the local species. Acknowledgements: Mr. RL Ihalamulla, Mr. S Jayasinghe for technical assistance. Financial support for this study was from Sri Lanka National Science Foundation and the Commonwealth Scholarship Association.

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