

Clinico-epidemiological and treatment satisfaction of patients with cutaneous leishmaniasis and risk factors for disease transmission in a high disease endemic district: A cross-sectional study in Kurunegala district, Sri Lanka

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Cutaneous leishmaniasis is a disease, caused by *Leishmania* parasites. This study focused on characterizing the clinico-epidemiological and risk factors for disease transmission and treatment satisfaction in a high disease endemic setup in Sri Lanka. The study was conducted in the Polgahawela and Polpithigama MOH areas, Kurunegala. Recorded leishmaniasis cases from 2020-2023 were retrieved, and a randomly selected case-control (1:1) cohort was interviewed using an interviewer-administered questionnaire. Clinical data was obtained from the patient's records available at the visit. The demographic and socioeconomic factors associated with cutaneous leishmaniasis in both case-control groups were compared by the Chi-square test. A total of 61 patients and 61 non-patients were interviewed. Most of the patients were females (50.8%) between the ages 5-14 years (21.3%) and 55-64 (21.3%). Students were the major occupational category (29.5%) followed by housewives (26.2%). In the control group females were predominant (50.8%). Age group 35-44 years represented the higher proportion (21.3%). Housewives (29.5%) and students (21.3%) were the major occupational categories. Nodular lesion type was predominant (49.2%) having one lesion (83.6%) with < 15 mm lesion in size (80.3%) mostly on hands (42.4%) followed by face (24.2%). Most of the patients (65.6%) and healthy individuals (60.7%) had not heard of leishmaniasis ($\chi^2= 0.32$) and had not seen a patient with similar symptoms (Test: 62.3%; Control: 67.2%). Level of awareness on causative agent (test: 1.6%; control: 3.3%; $\chi^2= 0.34$). Knowledge of the mode of transmission by sand fly was higher among patients (Test: 78.7%; Control: 62.3%; $\chi^2=3.94$). However, awareness of vector biting time (Test: 1.6%; Control: 1.6%) and protective measures (Test:16.4%; Control:16.4%) were poor in both groups, with no significant differences. Most patients (68.8%) had easy access to treatment, with 88.5% rating treatment satisfaction as excellent (34.4%) and good (54.1%). The findings highlight the need for improved public health education and awareness of disease prevention.

Keywords: Leishmaniasis, Risk factors, Disease awareness, Treatment satisfaction

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