PP 17 - Cutaneous leishmaniasis treatment failure to sodium stibogluconate in Southern Sri Lanka

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Introduction: Treatment failure (TF) of cutaneous leishmaniasis (CL) to intra-lesional sodium stibogluconate (IL-SSG) in Sri Lanka is threatening disease control. This study was aimed at identifying demographic and clinical factors of CL lesions associated with TF.

Methods: A descriptive cohort study was conducted at Base Hospital Tangalle and District General Hospital, Hambantota from April 2016 to October 2018. 201 laboratory-confirmed CL patients were recruited and followed-up weekly till 10 IL-SSG injections or until achieving complete cure, which ever came first. TF was defined as lesions not completely healed after 10 weekly IL-SSG injections, as judged clinically.

Results: A large proportion of study subjects (75.1%; 151/201) failed IL-SSG treatment. There were more adults than young patients in the TF group (84% ,127/151 adults aged 21-70 years and 16%, 24/151 young aged 1-20 years). Binary logistic regression analysis showed, factors such as the location of the lesion of the body, its number and the lag period between the disease onset and treatment appear prominent determinants of TF specially in the 1-30 years age group (p values < 0.05).

Conclusions: This is the first detailed study on characteristics of leishmaniasis treatment failures and associated demographic and clinical factors in Sri Lanka. Majority of the study population failed treatment with IL-SSG. This stresses the importance of further studies on TF, which may include associated factors related to host, parasitic as well as environment factors to understand the likely mechanisms of TF and combat TF accordingly.

Keywords: antimony failures, skin lesions, age related physiology, immune response

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