



409/D

**Screening for anti *leishmania* antibodies for visceral leishmaniasis and the presence of Leishman Donovan (LD) bodies in buffy coat films in patients in the renal unit in Teaching Hospital, Anuradhapura**

W M C W Menike<sup>1\*</sup>, R T Dasanayake<sup>2</sup>, R Wickremasinghe<sup>1</sup>, I S Wijesiriwardene<sup>3</sup>,  
I De Alwis<sup>4</sup> and P H K I S Ranasinghe<sup>1</sup>

<sup>1</sup> *Department of Parasitology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Nugegoda*

<sup>2</sup> *Nephrology Unit, Teaching Hospital, Anuradhapura.*

<sup>3</sup> *Department of Pathology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Nugegoda*

<sup>4</sup> *Blood Bank, Provincial General Hospital, Ratnapuara*

Cases of visceral leishmaniasis (VL) complicating kidney transplantation have increased globally in the last decades. Leishmaniasis is endemic to Sri Lanka. It is well reported that VL could be asymptomatic up to 20% of an endemic community. Of those, only 5% will progress to VL depending on the patient's immunity and nutrition. The aim of this study was to screen for anti *Leishmania* antibodies for VL and assess the presence of Leishman Donovan (LD) Bodies in the buffy coat films in the patients with Chronic Kidney Disease (CKD) or who have undergone kidney transplantation (KT) in the Teaching Hospital, Anuradhapura (THA).

Clinical features and blood samples of 170 individuals were collected. Clinical features were assessed for the presence of VL signs and symptoms. Buffy coat films stained with Giemsa stain were examined for LD bodies in blood macrophages and serum samples were screened for the presence of anti- *Leishmania* antibodies using rK 39 rapid diagnostic test strip (rK 39 RDT). None of the patients had past or current history of CL or VL. All 170 (100%) patients were negative for *Leishmania* amastigotes in buffy coat films and rK 39 RDT for anti - *Leishmania* antibodies.

This study suggests that thus far, VL is not a major problem among patients with renal diseases in a CL endemic area in Sri Lanka. However, the risk of VL transmission by blood transfusions/ organ transplantations and the possibility of CL visceralization with immune –suppression could not be ignored. Therefore, more serological tests are recommended to arrive at further conclusions.

**Keywords:** Visceral Leishmaniasis, Leishman Donovan bodies, buffy coat films, kidney transplantation, asymptomatics

**Acknowledgement:** Financial Assistance by the University of Sri Jayewardenepura (Grant No. Asp/01/Re/Med/2015/45).