

ASSESSMENT OF THE PREVALENCE OF *Leishmania* AMASTIGOTES IN BUFFY COAT FILMS IN PATIENTS IN A RENAL UNIT IN A CUTANEOUS LEISHMANIASIS ENDEMIC AREA IN SRI LANKA.

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ABSTRACT

Sri Lanka is one of the newly emerged leishmaniasis disease foci in the world. The disease presents in three major clinical forms; cutaneous leishmaniasis (CL) which is confined to the skin, mutilating mucocutaneous leishmaniasis (MCL)/mucosal leishmaniasis (ML) which involves the mucocutaneous junctions of the oro-nasal cavity and potentially fatal visceral leishmaniasis (VL)

The cases of visceral leishmaniasis (VL) complicating kidney transplantation have increased in the last decades. The aim of this study was to assess the presence of *Leishmania* amastigotes in blood macrophages of diagnosed patients with Chronic Kidney Disease (CKD) or who have undergone kidney transplantation (KT). Patients were enrolled from the renal clinics and the renal ward, Teaching Hospital, Anuradhapura (THA).

Data and blood samples of 170 individuals were collected and the buffy coat films stained with Giemsa's stain was examined. The population comprised individuals with CKD who have undergone repeated blood transfusions, immunosuppressive treatments and KT. Diagnosis of & selection of patients meeting the inclusion criteria was done by the Consultant Nephrologist at THA according to the criteria describe in KDIGO 2012.

All 170 patients were negative for *Leishmania* amastigotes in buffy coat films. None of the patients had past history of VL and none of the patients had proven past history of CL.

This study reveals that VL may still not be an acute problem among CKD/KT patients community in a Cutaneous Leishmaniasis (CL) endemic area in Sri Lanka.

However, serological tests are recommended to arrive at further conclusion regarding correlation between CKD/KT patient's population and VL in a cutaneous leishmaniasis endemic area in Sri Lanka.

KEYWORDS

Visceral Leishmaniasis, *Leishmania* amastigotes, Buffy coat films, Kidney Transplantation, Asymptomatic VL.

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