THE PREVALENCE AND CLINICAL ASSOCIATIONS OF HTLV-1 INFECTION IN A REMOTE INDIGENOUS COMMUNITY

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Background:
Hospital and laboratory data indicate that human T-lymphotropic virus type 1 (HTLV-1) is endemic to central Australia, but no community-based studies of its prevalence or disease burden have been reported. We determined the prevalence rates of HTLV-1 infection and of HTLV-1-associated diseases in a remote Indigenous community.

Methods:
This is a preliminary data analysis of a large community-based study conducted in 5 remote communities in central Australia. All residents were asked to complete a health survey and offered a limited clinical examination, together with serological tests for HTLV-1 and Strongyloides, and HTLV-1 proviral load (PVL) assessment.

Results:
HTLV-1 serostatus was determined for 459 residents. The prevalence of HTLV-1 infection in adults was 46% (n=338). Among HTLV-1 associated diseases the prevalence of HTLV-1 associated lung diseases was very high (10%). In this cohort the prevalence of reported diabetes, hypertension and kidney disease were 38% (n=337), 34% (n=255) and 24% (n=338) respectively. The median HTLV-1 PVL was 180 copies/10^5 PBL (IQR, 12-2258] and was significantly higher for those with chronic lung disease (1453 copies/10^5 PBL) compared to asymptomatic carriers (138 copies/10^5 PBL) [p=0.019].

Conclusion:
The prevalence of HTLV-1 infection and the rate of disease potentially attributable to HTLV-1 were high among adults in this remote community indicating a clear priority relative to other comorbid conditions.

Disclosure of Interest Statement:
Nothing to declare.