

Seroprevalence of HTLV-I/II in a tertiary-level hospital in Newark, NJ.

Jorge Robledo, Michael O'Shaughnessy, Tilly Varughese, Diana Finkel

Background: Human T-cell lymphotropic virus type I (HTLV-I) remain amongst the most neglected tropical diseases in the medical field due to its low prevalence in developed countries and the low incidence of its associated diseases: Adult T-cell lymphoma/leukemia (ATLL) and tropical spastic paraparesis (TSP). We proposed a higher prevalence of infections with this virus in Newark given its significant percentage of foreign-born residents of HTLV-endemic countries such as Jamaica, the Dominican Republic, Peru and Brazil.

Methods: Descriptive study from secondary data. We obtained the total number of HTLV-I/II tests performed at University Hospital in the last 2 years (05/2018-10/2020). Subsequently, medical charts were reviewed to obtain epidemiological and clinical data.

Results: A total of 89 patients underwent screening for HTLV-I/II, of whom 4 (4%) were positive. The test was more frequently ordered in male (61%) and foreign-born (84%) individuals. The main reasons for testing were Positive Strongyloides antibody in transplant candidates (20%), neurological symptoms (20%) and hematological symptoms (20%). In most cases, the test was ordered by Infectious Diseases (58%) and Neurology (18%). Being foreign-born was significantly associated with ordering the test in the case of non-transplant candidates (93% vs 56%, $p < 0.001$). Amongst the patients with positive serology, there were 2 cases of ATLL and 2 of TSP. Three of them had their country of origin registered (Ecuador, Barbados and Ghana). Family testing was only offered to one of the positive HTLV-I/II participants. Interestingly, this was the only case referred to Infectious Diseases.

Conclusion: There is low but significant seroprevalence of HTLV-I/II in our screened population. Most of the seropositive patients were lost to follow up and their relatives were not offered testing, demonstrating the need to raise awareness for this disease in our health care workers.