

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

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Background

- Human T-cell lymphotropic virus type I (HTLV-I) remains amongst the most neglected tropical diseases.
- Low prevalence in developed countries and low incidence of associated diseases.
- Family aggregation of HTLV-1 associated has been described hence WHO guidelines recommend testing children of HTLV-1 positive parents

Purpose/Objectives

- We proposed a high seroprevalence in our population given the significant percentage of foreign-born residents from HTLV-endemic countries such as Jamaica, Dominican Republic, Peru and Brazil

Methods and Materials

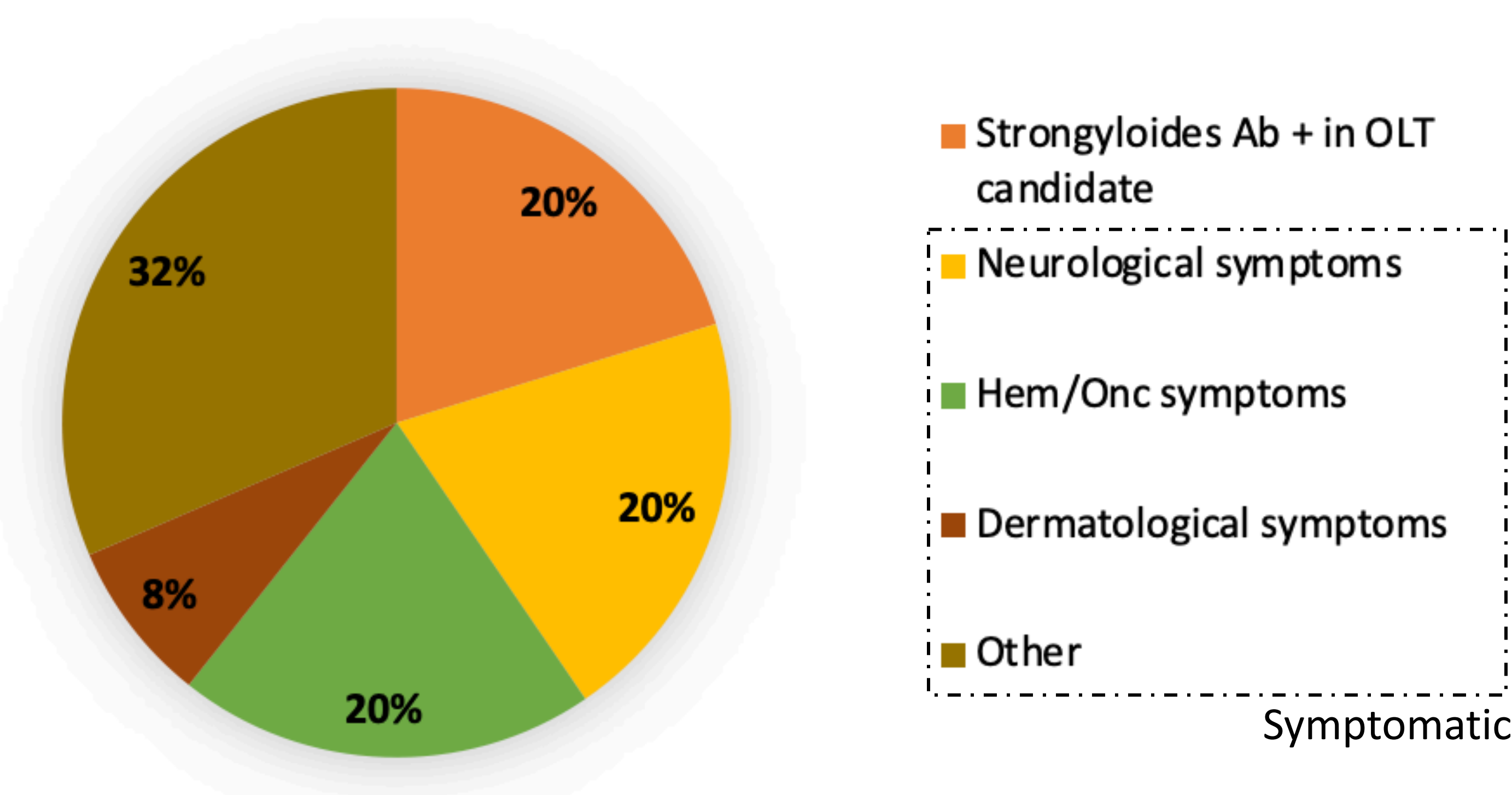
- Descriptive study from secondary data.
- We obtained the total number of HTLV-I/II tests performed in our facility in the last 2 years.
- Medical charts were reviewed for collection of epidemiological and clinical data.

Results

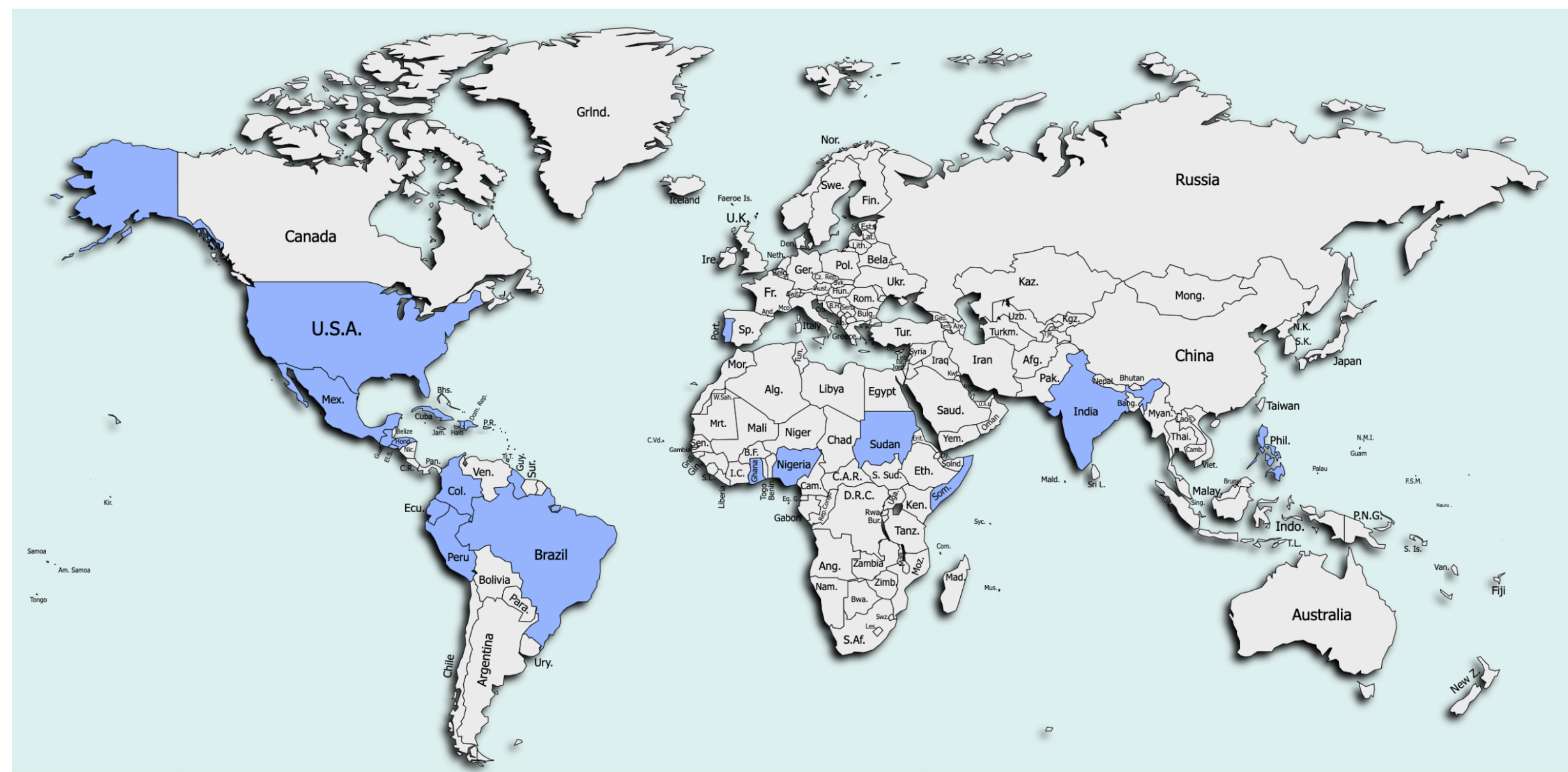
Demographic characteristics of 89 individuals screened for HTLV-I/II antibodies

HTLV-I/II tested individuals (n=89)		
Female	39% (n=35)	
Age (Median)	53 [37-61]	
Foreign-born	84% (n=61)	
Region of origin	US	16% (n=12)
	Latin America	40% (n=29)
	The Caribbean	22% (n=16)
	Africa	15% (n=11)
	Asia	5% (n=4)
	Europe	2% (n=1)
Specialty that ordered testing	Infectious Diseases	58% (n=52)
	Neurology	18% (n=16)
	Internal Medicine	12% (n=10)
	Hem/Onc	4% (n=4)
	Other	8% (n=7)

Reason for testing



- Below, the country of origin of the tested individuals are highlighted in blue



- Being foreign-born was significantly associated with ordering the test in the case of non-transplant candidates (p<0.001)

Reason for testing	US-born	Foreign-born
Strongyloides Ab + in OLT candidate	44% (n=8)	56% (n=10)
Other reason for testing ("Symptomatic")	7% (n=4)	93% (n=51)

- We found a seroprevalence of 4% (4) for HTLV-I/II. Below we present the characteristics and course of the positive cases.

Code	Sex	Age	Country of origin	Number of children
H001	F	40	Unknown	2
H002	F	71	Barbados	2
H003	F	29	Ecuador	1
H004	F	39	Ghana	1

Code	Reason for testing
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- H001 T-cell lymphoma
- H002 Leukocytosis + Flower cells on peripheral smear.
- H003 Spastic paraparesis.
- H004 Spastic paraplegia. History of father and brother are wheelchair bound.

Code	Specialty	ID consulted	Family testing offered
H001	Hem/Onc	No	No
H002	Hem/Onc	No	No
H003	Neurology	Yes	Yes
H004	Neurology	No	No

Serostatus disclosure was documented in one case. During chart review, we found that one patient (H001) had a positive HTLV-I/II relative (Mother – Cause of death: T-cell lymphoma)

Conclusions

- There is a low but significant seroprevalence of HTLV-I/II in our screened population.
- Most of the seropositive patients were not evaluated by Infectious Diseases and were lost to follow up. Offspring testing was offered in one case. This demonstrate the need to raise awareness for this disease in our health care workers