

# Strongyloidiasis in Solid Organ Transplant Candidates and Potential Donors: Demographics of Patients screened at a Large Academic Center in the United States.



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## BACKGROUND

- ***Strongyloides stercoralis*** is an intestinal nematode found in tropical, subtropical regions of the world and Southeastern United States including Florida
- Strongyloidiasis is a devastating disease in solid organ transplant (SOT) recipients, with mortality rates approaching 50 to 70%<sup>1</sup>
- It is recommended to screen populations from endemic areas with serology prior to transplant<sup>2</sup>
- Data on implementation and adequacy of screening guidelines and prevalence is lacking

## OBJECTIVES

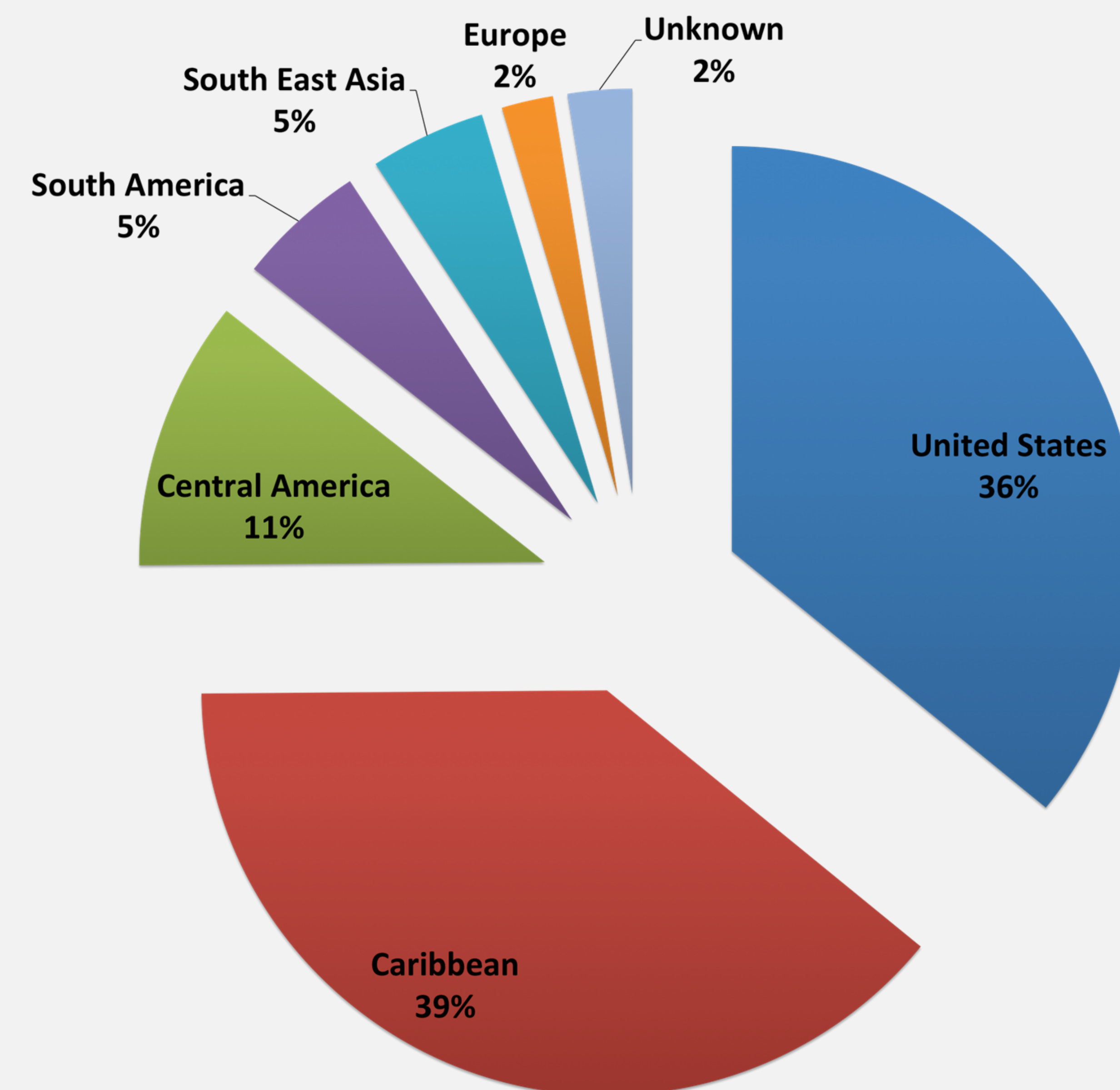
- To evaluate seroprevalence of *S. Stercoralis* among SOT candidates and potential donors at our center
- To describe demographics and clinical characteristics of seropositive patients

## METHODS

- Retrospective study conducted among SOT candidates and potential donors seen at the Miami Transplant Institute/ Jackson Memorial Hospital between September 2014 to December 2015
- Demographic information at the time of evaluation in pre-transplant clinic was collected
- Screening of patients was done with commercially available ELISA kits (Bordier).
- Descriptive statistics were calculated

## RESULTS

- 195 (11.8%) patients of 1642 screened were ***S. stercoralis*** seropositive
- Patient distribution by country or region of origin is displayed in Figure 1.
- Clinical and laboratorial findings among seropositive patients are displayed in Table 1.
- Co-infection with HIV was seen in 2% of patients, and co-infection with HTLV was present in 3%
- Of the 195 seropositive patients, 97% were SOT candidates and 3% were potential donors
- 107 (55%) were treated with ivermectin. In all cases, therapy was prescribed by Transplant Infectious Disease specialists
- 12% received transplants after completion of treatment



**Figure 1. Patient distribution by country or region of origin**

Demographics	No. of patients N = 195 (%)
<b>Age</b>	
18 -- 49 years	58 (30%)
> 50 years	137 (70%)
<b>Sex</b>	
Male	132 (68%)
Female	63 (32%)
<b>Race</b>	
Caucasian	107 (55%)
African American	36 (18.4%)
African Caribbean	37 (19%)
Asian	14 (7%)

**Table 1. Clinical and laboratory findings among patients *S. stercoralis* seropositive**

Clinical characteristics	No. of patients N=195 (%)
Asymptomatic	155 (79.4%)
Symptoms of underlying disease only	32 (16.4%)
Intermittent diarrhea	6 (3%)
Eosinophilia	68 (34.8%)

## CONCLUSION

- SOT candidates and potential donors should be screened for presence of *S. stercoralis* regardless of country or region of origin, symptoms, HIV or HTLV status and eosinophilia
- Patients *S. stercoralis* seropositive should be evaluated by Infectious Disease specialists

## REFERENCES

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