Everything Old is New Again: A Case Series of New World Cutaneous Leishmaniasis in African Children in Portland, Maine

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Introduction

-In 2019, Portland, ME (population 66,417) had an arrival of over 300 asylum seekers, primarily in June and July 2019.
-Asylum seekers originally from Central and West Africa (figure 1).
-Several pediatric patients were diagnosed with new world cutaneous leishmaniasis (NWCL)

Methods

-Charts of patients < 18 years old presenting with a diagnosis of cutaneous leishmaniasis were reviewed
-Cases identified by biopsy with culture and PCR performed at the federal CDC., with other microbiology studies as clinically indicated
-Data extraction included travel history, presentation, diagnosis, and management
-Study protocol approved by Maine Medical Center IRB

Results

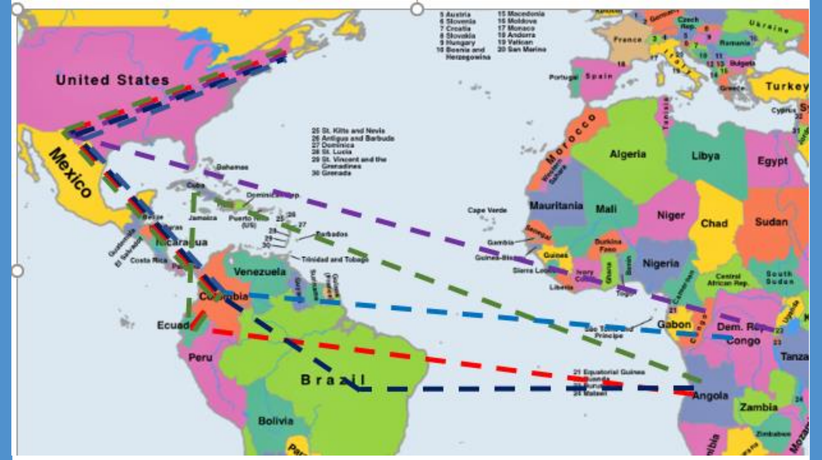
Table 1. Demographic Characteristics of NWCL Patients

Patient	Age	Sex	Country of Origin	Route Traveled
1	10 yo	F	Democratic Republic of Congo	Brazil, Columbia, Central America, US
2	15yo	F	Angola	Cuba, Ecuador, Columbia, Central America, US
3	19mo	F	Angola	Brazil, Columbia, Central America, US
4	10yo	F	Rwanda	Dallas, TX, Maine
5	10yo	F	Angola	Brazil, Columbia, Central America, US

Median Age: 10 years (range 1.5-15 years)

Results

Figure 1. Routes Taken by NWCL Patients to Portland, Maine



100% of patients traveled from non-endemic area through endemic area to non-endemic area

Table 2. Clinical Characteristics of NWCL Patients

Patient	No. of Lesions	Biopsy Results	Time to Diagnosis	Treatment
1	4	*L panamensis*	1 month	Ketoconazole
2	7	*L mexicana*	3 months	Ketoconazole
3	1	*L brasiliensis*	2 months	None
4	14	*Leishmania sp*	3 months	Ketoconazole
5	1	*L panamensis*	4 months	Excision

Three patients treated medically (60%), 1 patient observed (20%) and 1 patient excision only (20%)

Median time to diagnosis 3 months (range 1 -4 months)

Four (80%) referred for ENT evaluation

Results

Figure 2. Clinical Presentation of NWCL in African Patients

Patients originally diagnosed with cellulitis (3), tinea corporis (1), atopic dermatitis (1). Four patients (80%) initially treated with antibacterials, 1 patient (20%) with griseofulvin

Discussion

-Over 300 asylum seekers arrived in Portland, Maine in 2019, many from Angola and DRC, traveling through the US/Mexico border
-Children presented to various clinical sites with skin lesions of NWCL, likely acquired through travel through Central and South America, rather than country of origin
-Time to diagnosis and therapy was often prolonged, and many patients were previously treated for other conditions
-Index of suspicion for this diagnosis should remain high with epidemiologic history
-Optimal treatment regimens are varied and unclear

References

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