

# Cutaneous Leishmaniasis

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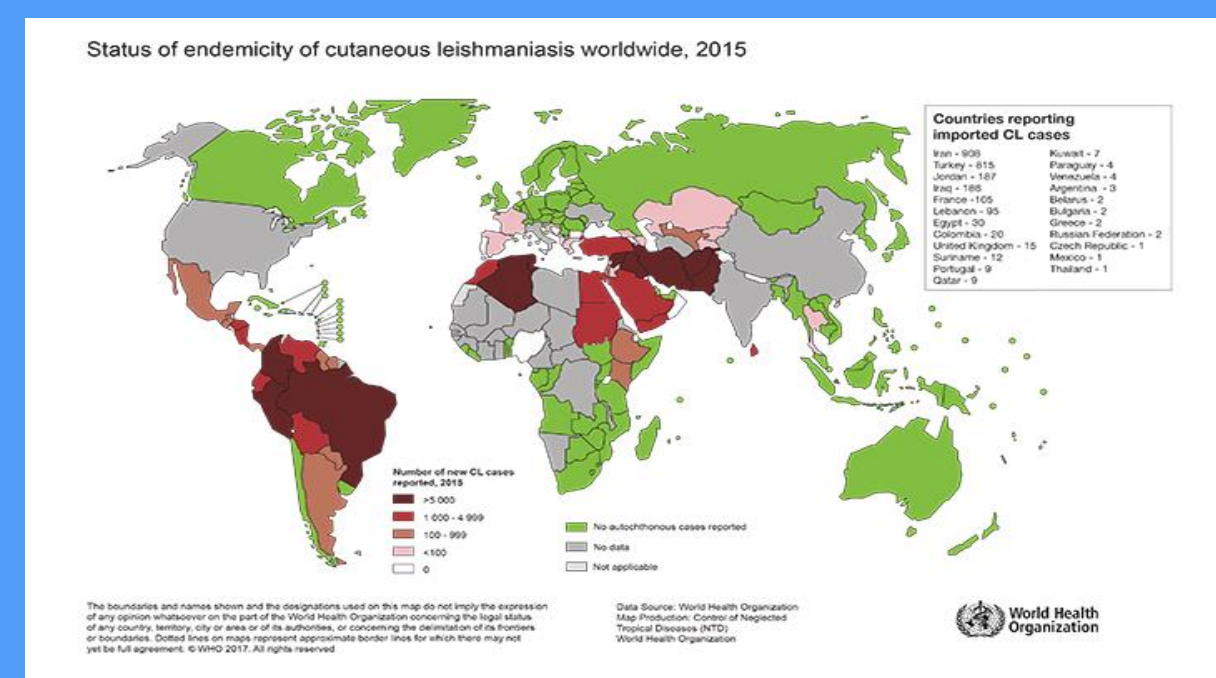
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## Background:

- Leishmaniasis is a neglected tropical disease spread by the bite of the phlebotomine sand fly
- This sand fly is found typically in the tropics, subtropics and southern Europe.



- The two most common types:
  - Cutaneous, which causes wounds in the skin
  - Visceral which affects internal organs (usually spleen, liver, bone marrow).
- While leishmaniasis is rare in the US, increasing trends of travel to tropical destinations necessitate awareness in dermatological and wound practices.



## Case study:

December 2016

39-year-old healthy female vacationed in Cancun, Mexico. She did **not** recall having trauma or insect bites during her trip.

June 2017

Developed a <1cm erythematous patch with subcutaneous nodule on the medial left lower extremity

November 2017

Lesion evaluated by dermatology. Differential diagnosis: Dermatofibroma vs Prurigo nodule vs. Epidermal Inclusion cyst vs. other. Treated with 2 mg triamcinolone injection

February 2018

Wound improved initially but then started to grow. Asymptomatic

March 2018

Developed a 2.5X 2.5 cm wound with ulcerated plaque, rolled borders and serous crusting. **14 months post travel**

March 2, 2018

Punch biopsy of left shin wound showed **granulomatous infiltrate with conspicuous microorganism-laden macrophages**. Microorganisms tend to line up along the edges of histiocytes.

March 27, 2018

Repeat biopsy specimen sent to **CDC with PCR testing confirmed Cutaneous Leishmanias Mexicana**

April 2018

Started treatment:

- 15% paromomycin topically BID for 4 weeks under occlusion
- Ketoconazole 400 mg PO BID for 4 weeks
- Intraconazole was not used due to insurance coverage issue

May 2018

Finished treatment

June 2018

Wound showed signs of healing but was persistent 2.5 X 2.5 cm with slightly erythematous edges, crusting and no evidence of granulation tissue. **Repeat biopsy showed no residual disease**

July 2018

**Referred to wound center**

- Wound bed with firmly adherent hard eschar and periwound induration
- Started serial excisional debridements and enzymatic debridements with collagenase until robust granulation tissue developed.



07/06/2018  
2.3 X 1.9 X 0.2



07/20/2018  
2.0 X 2.3 X 0.3



08/15/2018  
1.4 X 1.6 X 0

August 31, 2018

- Wound healed



08/31/2018  
0.1 X 0.1 X 0

## Conclusion:

- Patients presenting with wounds of unclear etiology should have **travel history included in the history of present illness (HPI)**.
- Differential diagnosis of atypical wounds **should include parasitic etiologies, especially when travel history includes tropical locations.**
- Once the infection is treated, **vigilant comprehensive wound care is required to heal the wound.**