

USAMMDA

U.S. Army Medical Materiel Development Activity

Current standard of care:

There is no standard regimen in the United States for the treatment of uncomplicated CL. Providers use a variety of different treatment options, the choice of which depends on the complexity and severity of the disease.

Current choices include:

- Monitored observation for healing without treatment.
- Local measures applied to the lesion:
 - Thermomed® delivers heat to the lesion, requires local anesthesia; FDA-cleared device.
 - Cryotherapy (liquid nitrogen) can result in increased scarring, especially in dark-skinned persons.
- Oral treatment with:
 - Off label use of azoles (such as Fluconazole).
 - Miltefosine, which is currently the only drug approved by the U.S. FDA to treat CL in the United States caused by *L. braziliensis*, *L. guyanensis*, and *L. panamensis*. The safety and efficacy of Miltefosine in the pediatric population has not been established.
- Intravenous treatment with:
 - Sodium stibogluconate (Pentostam®) under IND protocol at Walter Reed National Military Medical Center.
 - Off-label use of liposomal amphotericin B (AmBisome®, FDA-approved for visceral leishmaniasis (VL)) using VL dosing regimen.

For more information Contact

Naomi Aronson, MD

Uniformed Services University,
Bethesda, MD

[usarmy.detrick.medcom-usammda.list](mailto:usarmy.detrick.medcom-usammda.list.usarmy.detrick.medcom-usammda.list).

leishmania-tx-protocol@mail.mil

(This e-mail address is monitored 7 days/week)



References

- Ben Salah, et al. A. Topical Paromomycin with or without Gentamicin for Cutaneous Leishmaniasis. *New England Journal of Medicine*, 2013; 368: 524-532.
- Berman JD. Chemotherapy for leishmaniasis: biochemical mechanisms, clinical efficacy, and future strategies. *Rev Infect Dis*. 1988;10:560-86.
- Ravis, et al. Pharmacokinetics and Absorption of Paromomycin and Gentamicin from Topical Creams Used to Treat Cutaneous Leishmaniasis. *Antimicrobial Agents and Chemotherapy*. 2013, October: 57(10): 4809-4815.
- Sosa, et al. Randomized, Double-Blinded Phase 2 Trial of WR 279,396 (Paromomycin and Gentamicin) for Cutaneous Leishmaniasis in Panama. *American Journal of Tropical Medicine and Hygiene*. 2013, 89(3): 557-563.
- Under Secretary for Health. Under Secretary for Health's Information Letter: Guidance for the diagnosis and treatment of Leishmania infection IL 10-2004-013. 6 October 2004.

Visit our website:

www.usammda.army.mil

U.S. Army Medical Research and Materiel Command

Updated: June 13, 2016



*Developing Quality Medical Products
for U.S. Forces*

Expanded Access Treatment Protocol for Uncomplicated Cutaneous Leishmaniasis



**(Paromomycin Topical Cream) Treatment
Protocol for DoD Beneficiaries**

** Program Information and Flow Chart
For Physician Reference Only*



Off-Label

Clinical Presentation

Leishmaniasis, an illness caused by *Leishmania* spp. parasites, is transmitted by infected female phlebotomine sandflies. It occurs in approximately 98 tropical and subtropical countries around the world, including portions of both the New World (tropical and subtropical areas of the Americas) and the Old World (primarily southwestern Asia, Africa, and southern Europe) (Under Secretary for Health-2004). Seventeen species of *Leishmania* can cause Cutaneous Leishmaniasis (CL) in humans.



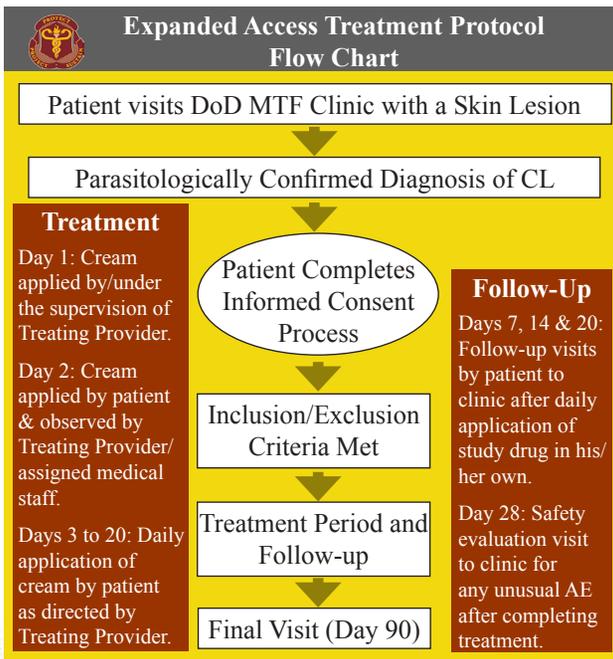
Cutaneous leishmaniasis typically presents as a papule that enlarges over approximately one month into an ulcer with raised edges and a necrotic center (Berman-1988). Most lesions are simple cutaneous lesions with the classical circular *Leishmania* ulcer consisting of elevated, discolored borders and sharply incised central crater.



Process

This is an expanded access treatment protocol designed to provide a topical cream treatment option to military health care beneficiaries with parasitologically confirmed, uncomplicated CL. This treatment is not yet licensed by the Food and Drug Administration (FDA) and is only available under an Investigational New Drug (IND) Application.

- Military care beneficiary presents at a DoD Military Treatment Facility (MTF) with a skin lesion clinically and epidemiologically consistent with CL. Routine diagnostic parasitology testing will be performed as standard of care.
- After positive diagnosis of CL, patient can be offered the option to participate in this treatment protocol.
- After completing the informed consent process, patient will receive treatment with paromomycin, if eligible to participate.
 - Topical cream will be sent to the treating provider to permit treatment at provider's MTF and self-administration by the patient.



Drug Administration

Paromomycin cream applied topically to CL lesions once per day for 20 days.



Photos showing response to paromomycin topical cream in a patient.

Key Criteria for Inclusion and Exclusion

Inclusion Criteria:

- Male or Female DoD Health Care Beneficiaries.
- Any age.
- At least one lesion positive for *Leishmania* parasites. Diagnostic methods may be performed either at the Leishmania Diagnostic Laboratory at the Walter Reed Army Institute for Research or the Clinical Parasitology Service, Centers for Disease Control and Prevention.
- Lesions must be in a location amenable to topical treatment and there should be no clinical evidence of mucosal involvement.

Exclusion Criteria:

- Known allergy to aminoglycosides.
- Females who are pregnant or breastfeeding.



Photos showing response to paromomycin topical cream in a patient.