Leishmania tropica

Cutaneous leishmaniasis (CL)

Multiple lesions on arm with a variety of appearances.

Leishmania tropica

Cutaneous leishmaniasis (CL)

Both lesions are leishmaniasis.

Note the raised border and wet appearance of the sore on the back of the hand.

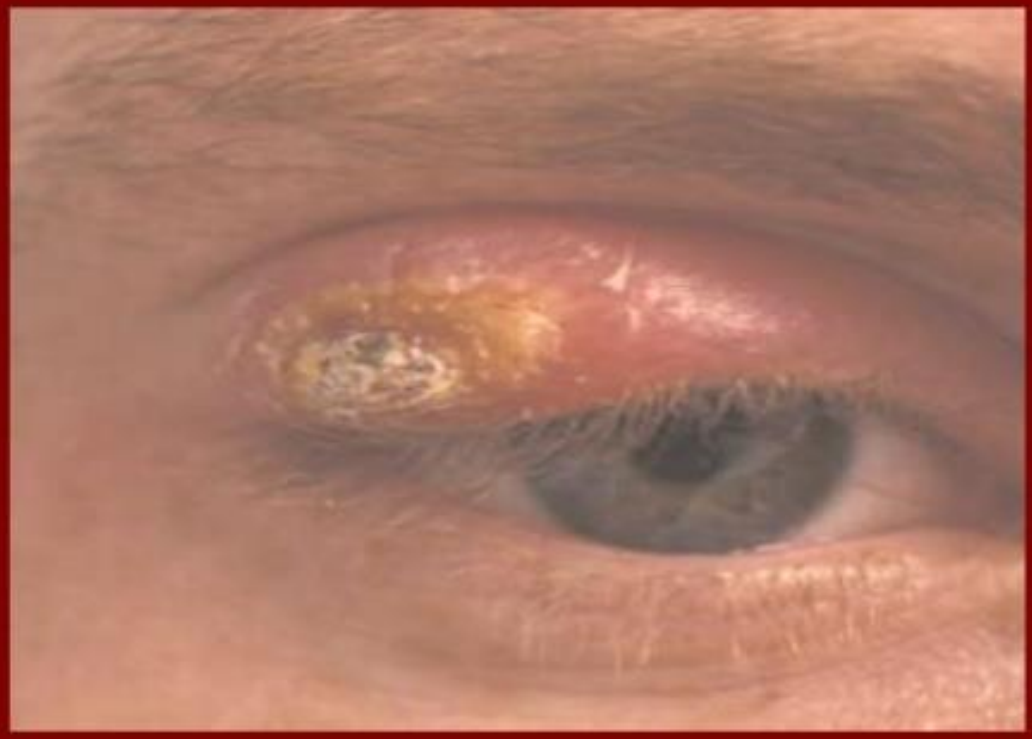
Leishmania tropica

Cutaneous leishmaniasis (CL)

Back of hand.
Note raised border and wet appearance.
Patient has bacitracin ointment applied to lesion.

Leishmania tropica

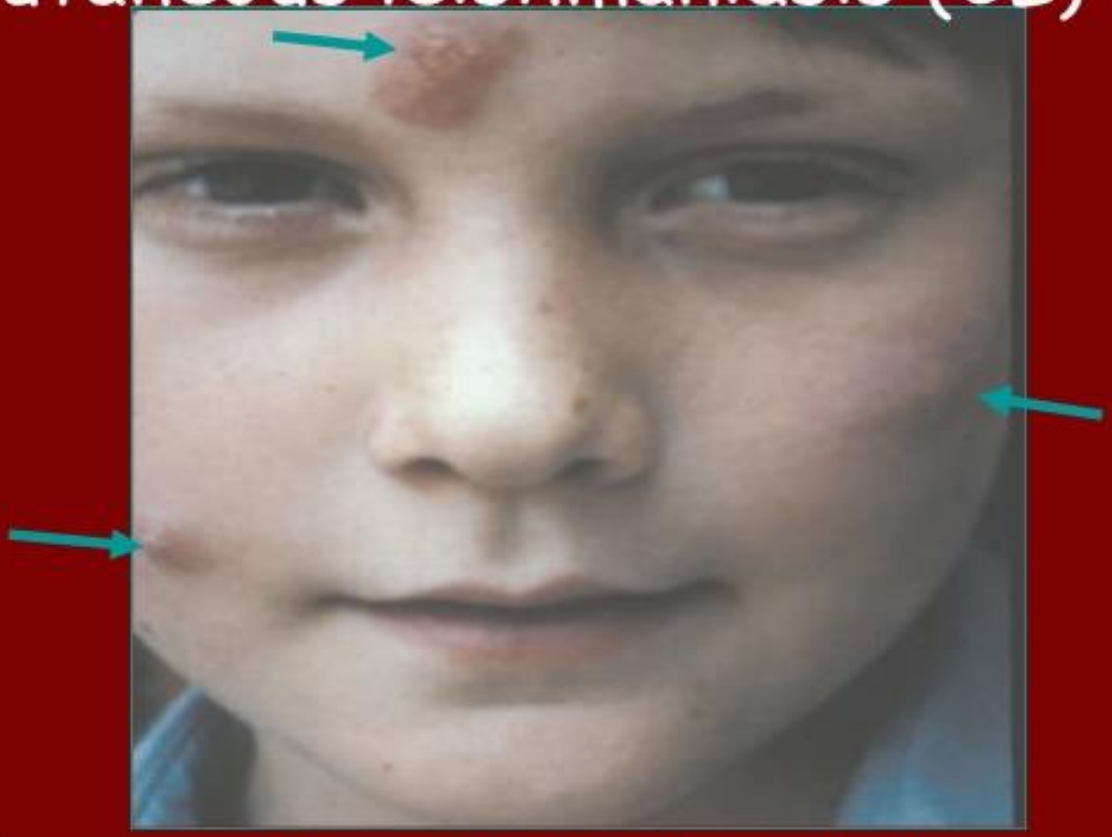
Cutaneous leishmaniasis (CL)



Upper Eyelid. Note the dry, crusted appearance which is different than previous sores shown.

Leishmania tropica

Cutaneous leishmaniasis (CL)



Three lesions on face. Raised and dry.
Another different presentation.

Leishmania braziliensis

Mucocutaneous Leishmaniasis (MCL)

G.D. In South and Central America (Brazil, Bolivia, and Peru)

Habitat:- Skin and mucosa

Disease mucocutaneous leishmaniasis, espundia, Uta, American leishmaniasis

Transmission: female Sandflies *Lutzomyia*

Mucocutaneous Leishmaniasis

- *Leishmania braziliensis* and *L. maxicana* cause mucocutaneous leishmaniasis. Amastigotes are found in macrophages in ulcerations at mucocutaneous junctures of the skin. This disease is also known by various other names, including American leishmaniasis, espundia.
- A specific lesion of caused by *L. mexicana* is **chiclero ulcer** which is characterized by ulcerations in pinna. Chiclero ulcer is also called as **self healing sore of Mexico**.
- *L. braziliensis* causes the most severe and destructive form of cutaneous lesion. It involves the nose, mouth, and larynx.
- Subsequent **mucocutaneous** involvement leads to nodules inside the nose, perforation of the nasal septum, and enlargement of the nose and lips **(espundia)**. If the larynx is involved, the voice changes as well. Ulcerated lesions may lead to scarring and tissue destruction that can be disfiguring.

Leishmania braziliensis

Mucocutaneous Leishmaniasis (MCL)

Laboratory Diagnosis:

1. Microscopy:
   (slit-skin smear, splenic aspirate, liver biopsy or bone marrow biopsy). Examination of Giemsa and Leishman stained slides of the relevant tissue is still the technique most commonly used to detect the parasite.
2. **Culture:**

The aspirates can be cultured in NNN. In culture the **amastigote** stage converts to the **promastigote** stage. However, this is not a rapid technique, as the parasites may take from 10 - 21 days to grow.

Laboratory Diagnosis:

3. Serodiagnosis:
VL produces large amounts of specific IgG which can be used for diagnosis. Currently the most used serodiagnostic tests Enzyme Linked Immunosorbent Assay (ELISA).
4. Molecular techniques: PCR, such technique, however, are not readily available in general diagnostic laboratories.

Treatment

- Pentavalent antimonial drugs, e.g. meglumine antimonate, sodium stiboglucomate.

- Other drugs like pentamidine, amphotericin B and allopurinol are used as an alternative to pentavalent antimonial drugs.