

Leishmania

Cutaneous leishmaniasis

Common types

Leishmania major: Zoonotic cutaneous leishmaniasis: **wet** lesions with **severe** reaction.

Leishmania tropica: Anthroponotic cutaneous leishmaniasis: **Dry** lesions with **minimal** ulceration.

Oriental sore: (most common) classical self-limited ulcer.

Un-Common types

Diffuse cutaneous leishmaniasis (DCL): Caused by **L. aethiopica**, diffuse nodular **non-ulcerating** lesions. **Low immunity** to Leishmania antigens, **numerous parasites**.

Leishmaniasis recidiva (lupoid leishmaniasis): Severe immunological reaction to leishmania antigen leading to persistent dry skin lesions, **few parasites**.

Diagnosis

Smear: **Giemsa stain** – microscopy for LD bodies (**amastigotes**)

Biopsy: microscopy for LD bodies or culture in **NNN medium** for promastigotes

Treatment

Self-healing lesions.

Medical:

Pentavalent antimony (**Pentostam a sodium stibogluconate**), **Amphotericin B**.
+/- **Antibiotics** for secondary bacterial infection.

Surgical: Cryosurgery, excision, curettage.

Visceral leishmaniasis

Disease called **kala-azar**.

Leishmania infantum → children.

Leishmania donovani → adults.

Symptoms

Fever, splenomegaly, hepatomegaly, hepatosplenomegaly, weight loss, anaemia, epistaxis, cough & diarrhea.

✓ After recovery it may cause **post kala-azar dermal leishmaniasis (PKDL)**.

Diagnosis

Bone marrow aspirate, splenic aspirate, lymph node, tissue biopsy.

Then use **microscopy** or **culture NNN medium**.

Serology: direct Agglutination Test (DAT), ELISA, IFAT.

Skin test (leishmanin test) for **survey** of populations and **follow-up** after treatment.
Detection of hypergammaglobulinaemia by formaldehyde (formol-gel) test or by electrophoresis.

Treatment

Pentostam

Amphotericin B