Visceral Leishmaniasis

Ram Balak Mahto
Guest faculty
Zoology department
v.s.j college Rajnagar Madhubani
Class B.Sc 1st yr. Paper 1, group-A
7908055676

Visceral Leishmaniasis

- 1903 William Leishman
- 1920 Pentavalent antimony
- 1931 Experimental transmission

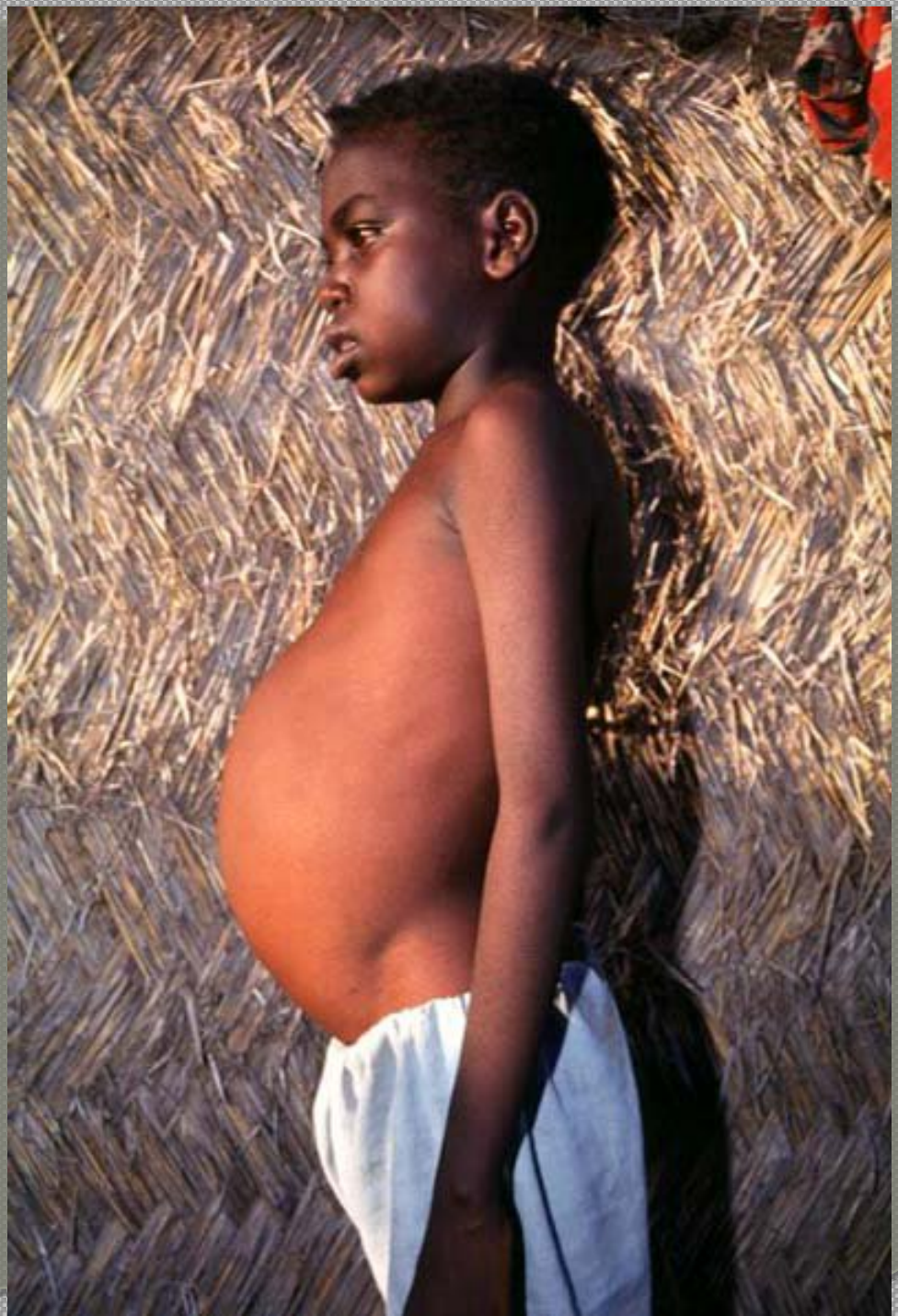
Leishmania donovani (Complex)

L.d. archibaldi - L.d.chagasi - L.d.donovani - Ld.infantum

VL - Clinical Manifestation

- Variable - Incubation 3-100+ weeks
- Lowgrade fever
- Hepato-splenomegaly
- Bone marrow hyperplasia
- Anemia, Leucopenia & Cachexia
- Hypergammaglobulinnemia
- Epistaxis , Proteinuria, Hematuria

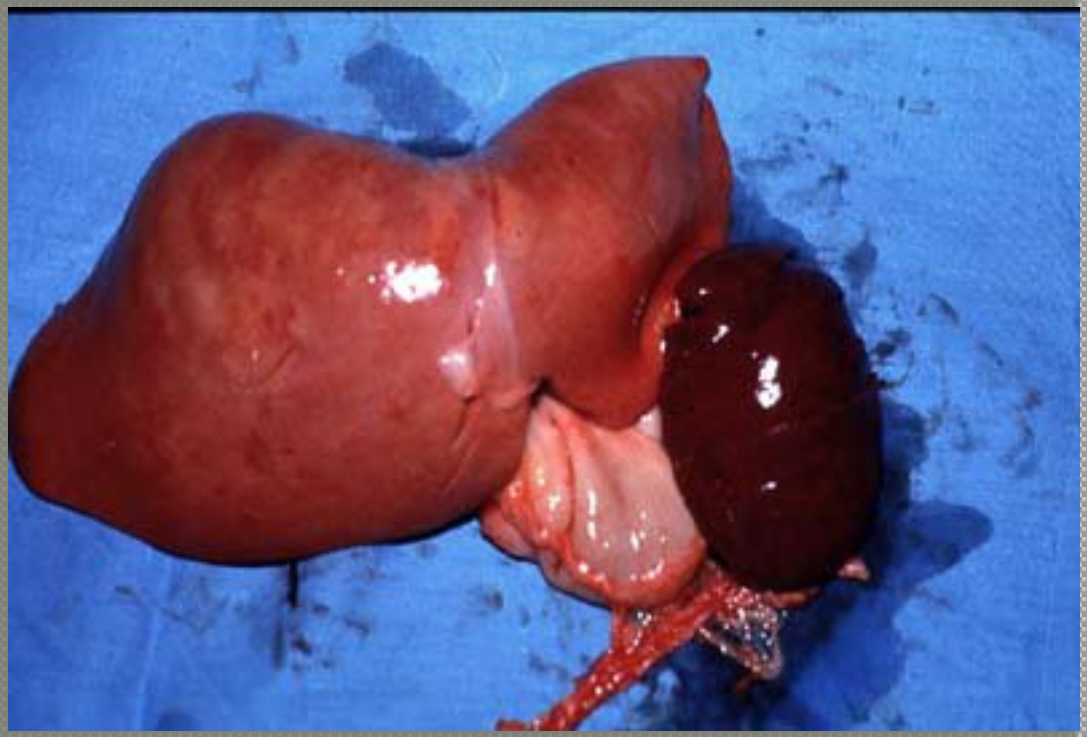
- Profile view of a teenage boy suffering from visceral leishmaniasis. The boy exhibits splenomegaly, distended abdomen and severe muscle wasting.



- A 12-year-old boy suffering from visceral leishmaniasis. The boy exhibits splenomegaly and severe muscle wasting.

- Jaundiced hands of a visceral leishmaniasis patient.

- Enlarged spleen and liver in an autopsy of an infant dying of visceral leishmaniasis.



Post Kala Azar Dermal Leishmanoid

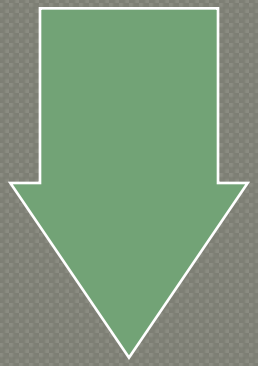
- Normally develops <2 years after recovery
- Recrudescence
- Restricted to skin
- Rare but varies geographically

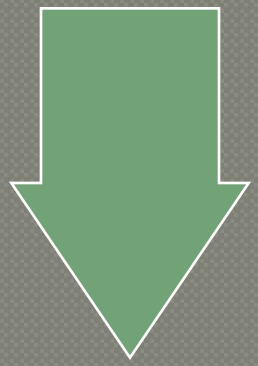
Cutaneous leishmaniasis of the face.

A cutaneous leishmaniasis lesion on the arm.

INFECTION

Sub-clinical or inapparent infection





Recovery

Immune to reinfection

PKDL

Death

Concurrent infection

Diagnosis

- Clinical signs & symptoms
- Hypergammaglobulinemia
- ELISA/Formol gel
- Bone marrow biopsy
- Spleen or liver biopsy
- Culture & Histology

Speciation

- Similar morphology
- Isoenzyme profiles - Zymodemes
- Monoclonal antibodies
- DNA hybridisation - PCR

Treatment

- Good nursing
- Diet
- Antibiotics
- Pentavalent antimony
- Pentamidine

- New drugs - New delivery

Control

- Vector control
- Reservoir control
- Treatment of active cases
- Vaccination