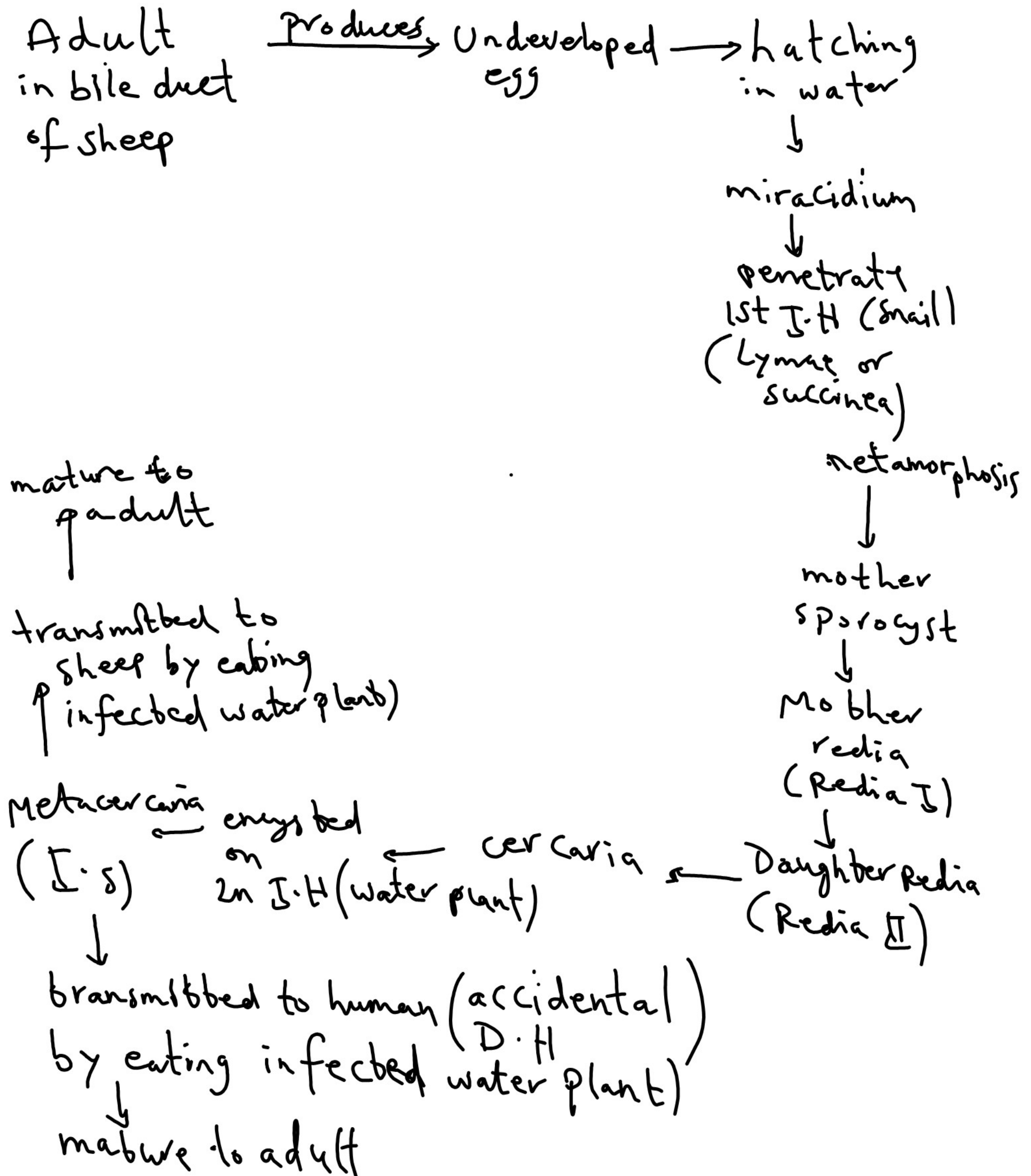


Life cycle of Fasciola hepatica



Pathogenesis:

- Hepatospleno megaly.
- Anemia

Diagnosis: Microscopic examination
of bile salt (secretion).

Treatment: Dichlorophene.

leishmania



The main species of Leishmania are : ○

L. donovani (visceral). -

L. tropica (cutaneous). -

L. mexicana (cutaneous). -

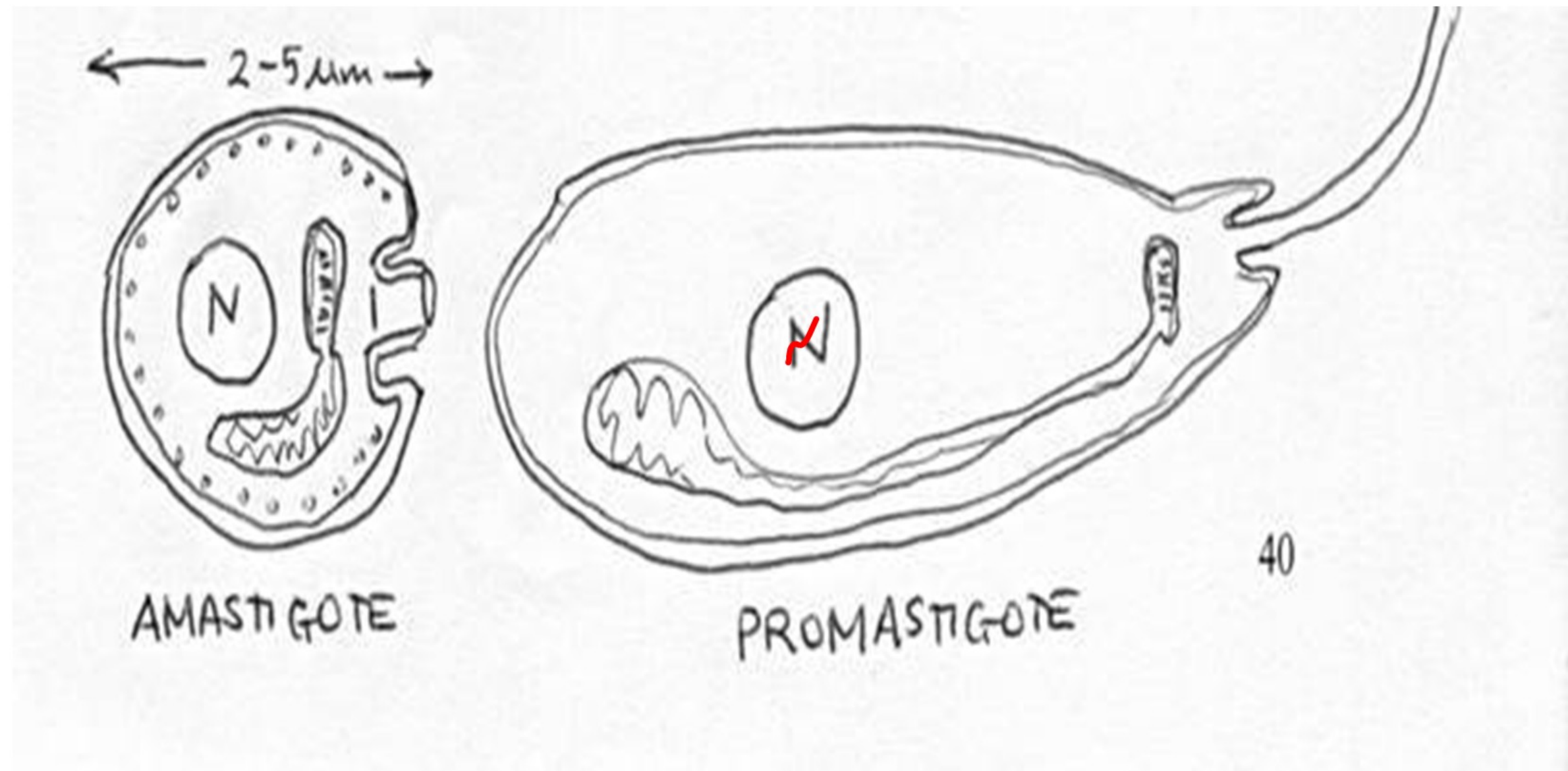
L. braziliiana (cutaneous & subcutaneous). -



Two stage in life cycle :

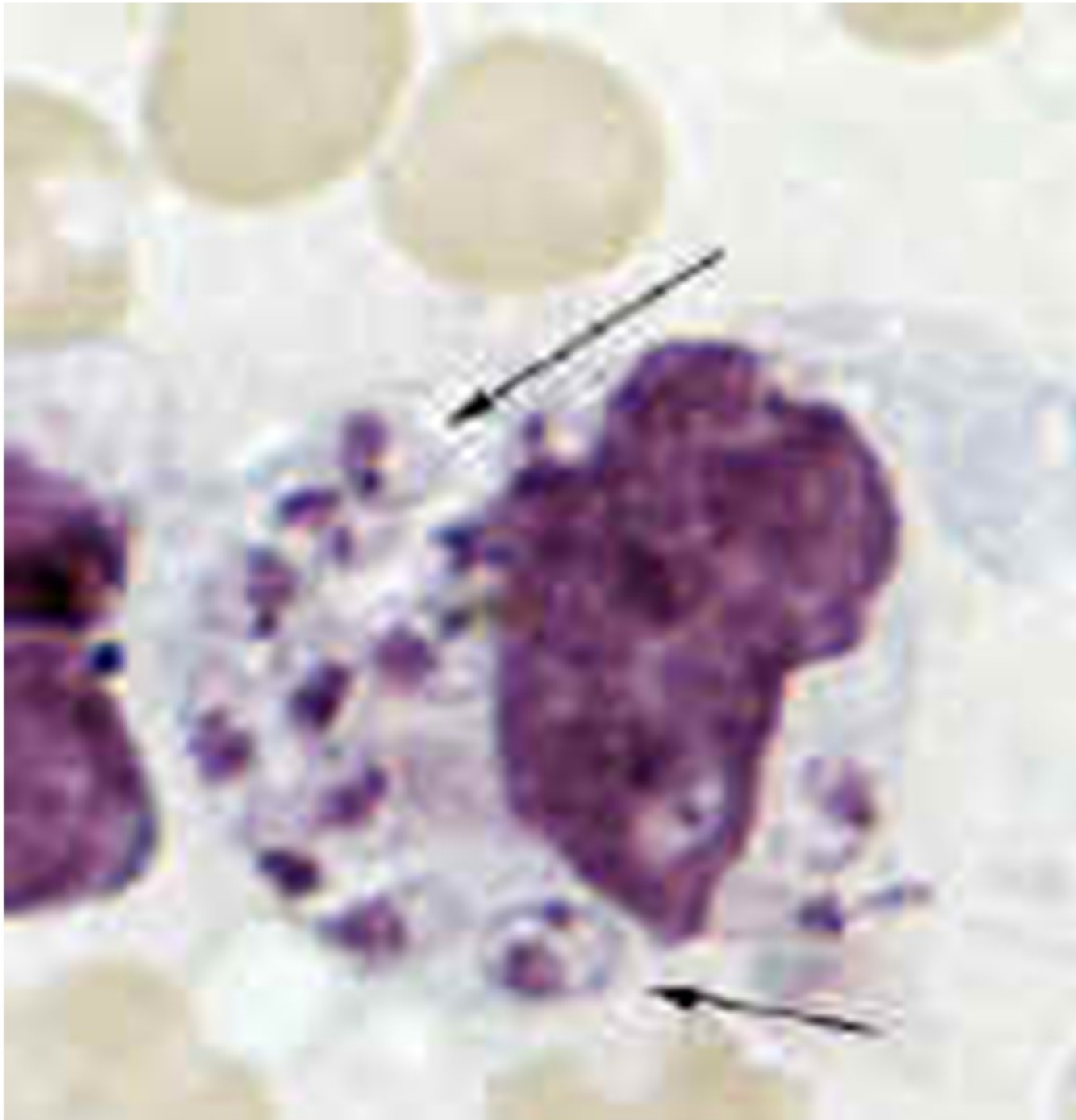
Amastigote

Promastigote (I.S)

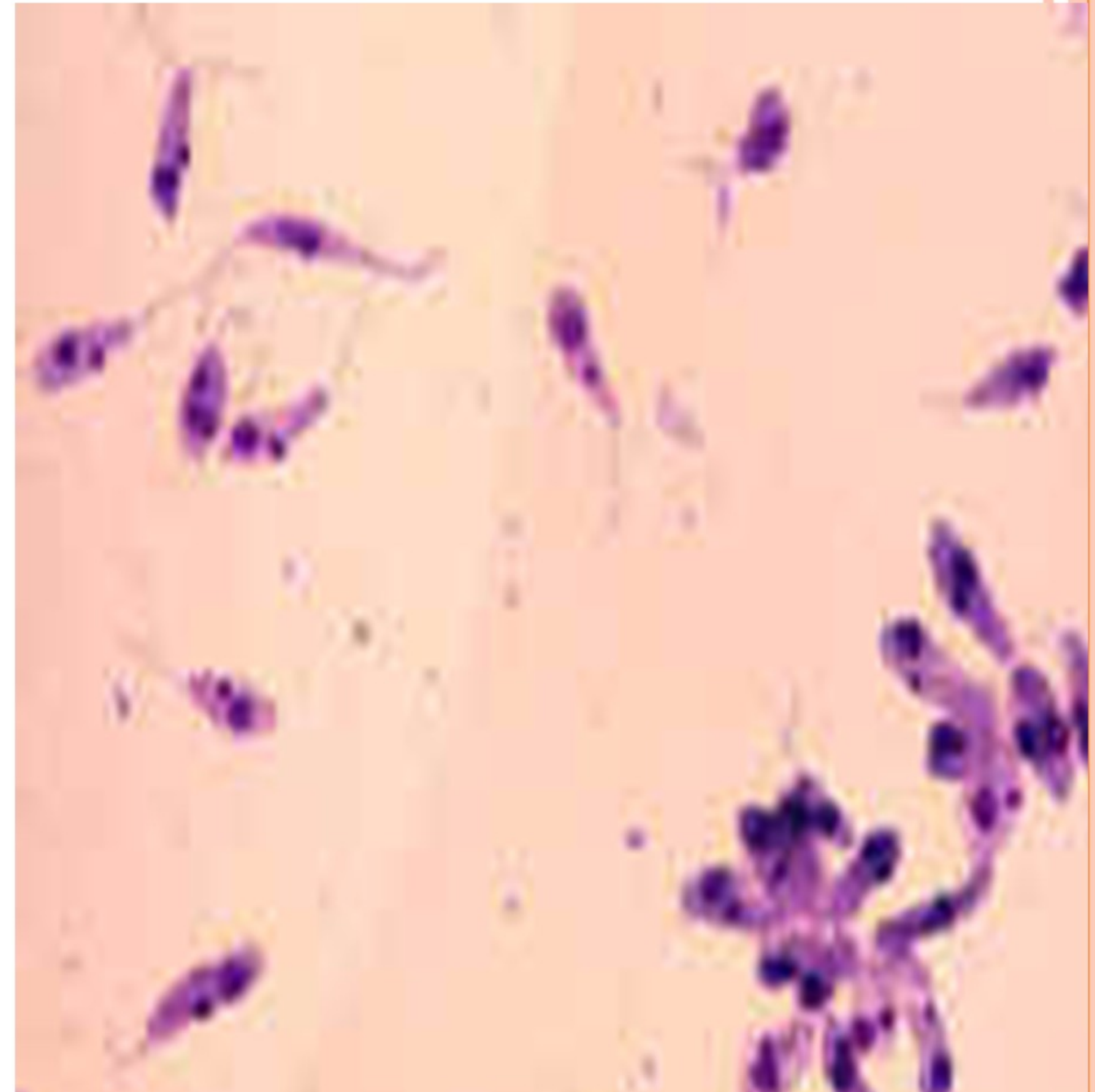


EM





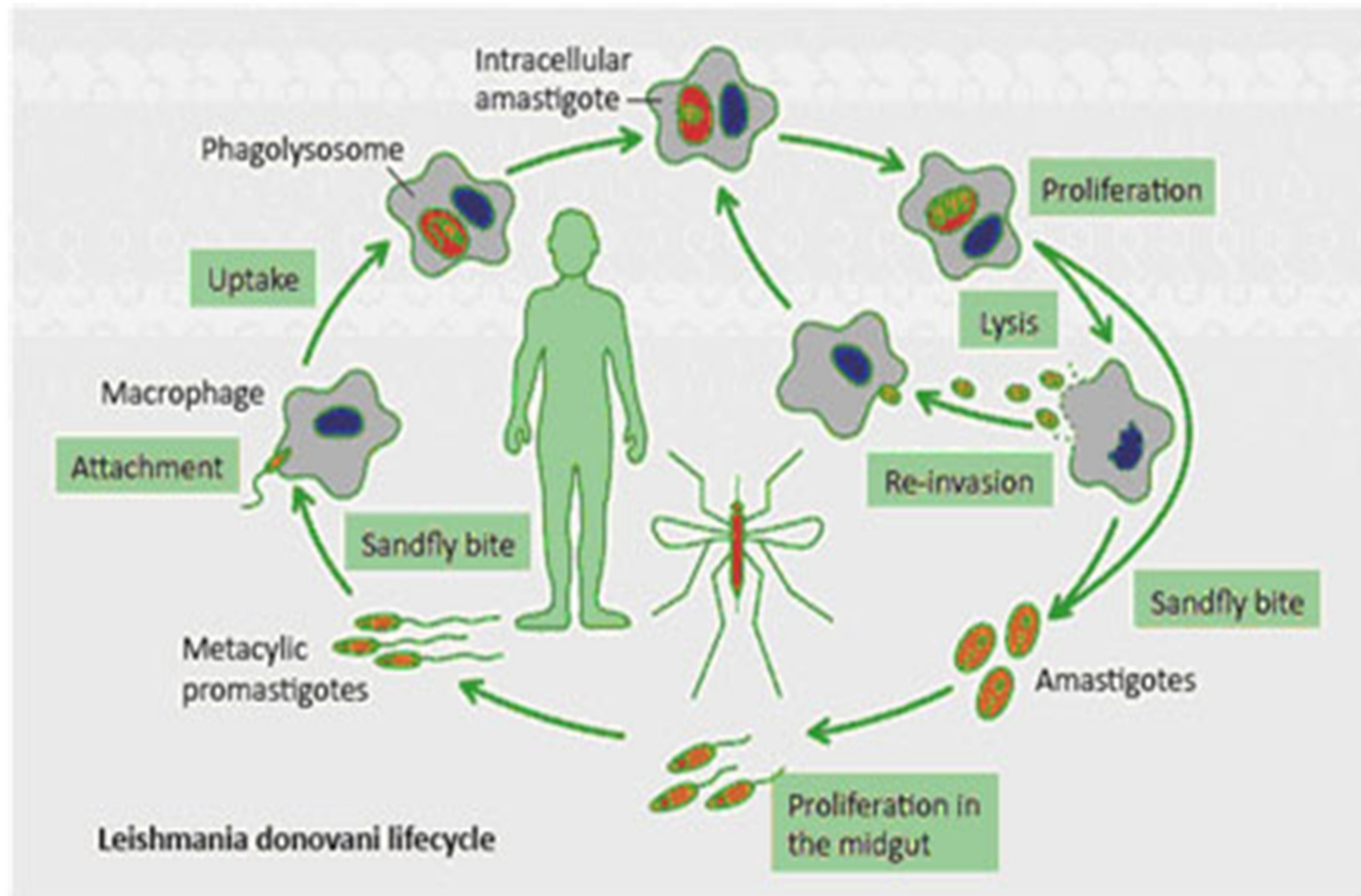
AMASTIGOTES



PROMASTIGOTES



LIFECYCLE OF *LEISHMANIA DONOVANI*



What Is Leishmaniasis?

Leishmaniasis is a parasitic disease. It is spread by the bite of an insect called a sand fly.

Leishmaniasis is sometimes called kala-azar.

There are two main forms of the disease. Each is associated with different species of the parasite.

Cutaneous leishmaniasis affects the skin.

Visceral leishmaniasis damages the internal organs. Cutaneous disease is usually not serious.

Visceral disease can be fatal.

Types of Leishmaniasis

Different species of *Leishmania* are associated with each form. About 30 *Leishmania* species have been defined. At least 20 of these are thought to cause disease in mammals

Visceral Leishmaniasis :

Visceral leishmaniasis is sometimes called systemic leishmaniasis. It usually occurs two to eight months after a sandfly bite. It damages the internal organs, such as the spleen and liver. It also affects the immune system, through damage to those organs.



Cutaneous Leishmaniasis

Cutaneous leishmaniasis only causes ulcers on the skin. It is the most common form of leishmaniasis. Treatment may not always be necessary. However, it can speed healing and prevent complications.





Mucocutaneous Leishmaniasis

A third, rare form of the disease is called mucocutaneous leishmaniasis. It can occur several months after skin ulcers heal. This type of leishmaniasis affects the mucous membranes of the nose and palate. It is usually considered a subset of cutaneous leishmaniasis. However, it is more serious.



What Are the Symptoms of Leishmaniasis?

Cutaneous Leishmaniasis

The main symptom of this condition is painless skin ulcers. Cutaneous symptoms may appear only one to two weeks after the sandfly bite.



visceral Leishmaniasis

Symptoms often do not appear for months after the bite.

Symptoms include:

weight loss

weakness

a fever that lasts for weeks or months

an enlarged liver and spleen

decreased production of RBCs

bleeding





Diagnosing Cutaneous Leishmaniasis

The doctor may take a small amount of skin for a biopsy. This is done by scraping one of the ulcers. To identify the parasite, the samples may be examined under a microscope or grown in culture.



Diagnosing Visceral Leishmaniasis

- physical exam
- bone marrow biopsy or blood sample may be taken for examination.



How Is Leishmaniasis Treated?

Treatment is performed with antiparasitic drugs, such as amphotericin B.

Cutaneous Leishmaniasis

Treatment can speed healing and reduce scarring. It can also prevent the development of further disease.



TREATMENT OF VISCERAL LEISHMANIASIS

The main types of medicine used are antimony-containing compounds. These include meglumine antimoniate and sodium stibogluconate.



How Can Leishmaniasis Be Prevented?

There is no vaccine or prophylactic medication available. The only way to prevent leishmaniasis is to avoid getting bitten by a sandfly.

To avoid a sandfly bite, be sure to:

1-wear clothing that covers as much skin as possible.

2-use insect repellent on any exposed skin. The most effective insect repellents contain DEET.

3-avoid the outdoors between dusk and dawn—this is when sandflies are most active.

