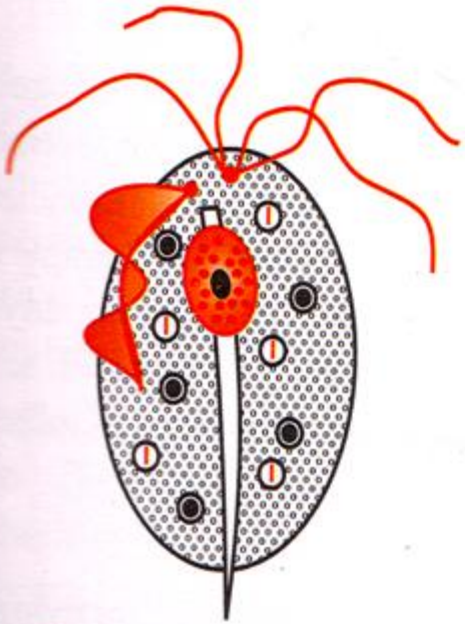
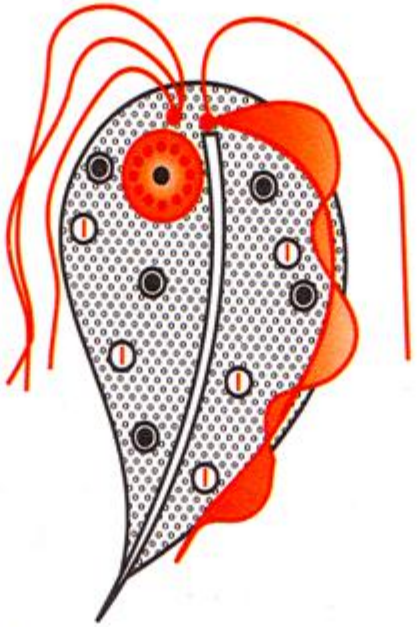
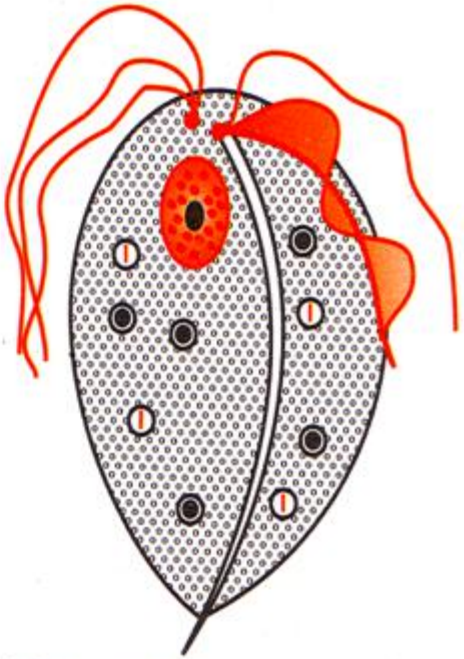
TRICHOMONAS



Trichomonas tenax



Trichomonas hominis



Trichomonas vaginalis

TRICHOMONAS VAGINALIS

- HABITAT

Human vagina, prostate, & urinary tract of both male & female.

TRICHOMONAS VAGINALIS

DISTRIBUTION

- World wide in distribution.
- Incidence in normal population is 10%.
- Asymptomatic infections in 50% of infected female patients.

MODE OF INFECTION

Sexually transmitted

TRICHOMONAS VAGINALIS

PATHOGENESIS

- Exact mechanism is not known.
- It depends upon inherent virulence of the parasite & host factors.

TRICHOMONAS VAGINALIS

CLINICAL FEATURES

- Mild vaginitis with discharge.
- Discharge is liquid , greenish or yellow in color.
- Discharge covers the vaginal mucosa down to urethral orifice, vestibular gland & clitoris.
- Male patients have mild or asymptomatic infections.
- Males develop itching and discomfort during micturation.

TRICHOMONAS VAGINALIS

- ***LABORATORY DIAGNOSIS***

➢ In light microscopy;

Motile trophpzoites in wet mount preparation of urine sediments, vaginal secretions or scrapings.

In males it may be found in urine /prostatic secretions.

➢ Fixed smears stained with Papanicolaou, Giemsa, Leishman stain examined under light microscope

➢ Fluorescent microscopy.

TRICHOMONAS VAGINALIS

- *LABORATORY DIAGNOSIS*

➢ Trichomonas vaginalis can be isolated on culture medias e.g. Trussel & Jhonson's medium, Simplified trypticase serum medium

➢ For best growth in Simplified trypticase serum medium ;

Temperature--35-37°C under anaerobic conditions.

ph---5.5_6.0.

➢ Nucleic acid hybridization.

➢ PCR

TRICHOMONAS VAGINALIS

- ***PREVENTION***

➢ Detection & treatment of cases.

➢ Avoidance of sexual contact with infected persons.

➢ Use of condoms.

➢ There is no vaccine available.

TRICHOMONAS VAGINALIS

TREATMENT;

- Metronidazole 250mg x TDS X 7 days.

  OR

  2gm orally X stat.
- Metronidazole is C. I in pregnancy. So topical therapy with clotrimazole 100mg X OD X 7 days.
- Simultaneous treatment of sexual partner is done to prevent recurrence of infection.

LEISHMANIA

CLASSIFICATION OF LEISMANIA

Species	Form of disease	Geographical distribution
	Old World leishmaniasis:	
Leishmania donovani	Visceral leishmaniasis, kala-azar, post kala-azar dermal leishmaniasis	Indian subcontinent, Africa, Middle East
L. infantum	Infantile visceral leishmaniasis	China, Mediterranean coast, Middle East
L. tropica	Urban anthroponotic cutaneous leishmaniasis, Oriental sore	Central Asia, Middle East
L. major	Rural, zoonotic, cutaneous leishmaniasis, Oriental sore	Indian subcontinent, Central Asia, Africa
L. aethiopica	Cutaneous leishmaniasis, diffuse cutaneous leishmaniasis	Ethiopia, Kenya
	New World leishmaniasis:	
L. braziliensis complex	Mucocutaneous	Tropical South America
L. mexicana complex	Cutaneous	Central America
L. peruviana	Cutaneous	Western Peru
L. chagasi	American visceral leishmaniasis	Tropical South America

LEISHMANIA DONOVANI

(OLD WORLD LEISHMANIASIS)

LEISHMANIA DONOVANI

DISEASE

- Visceral leishmaniasis & Kala-azar.
- Hypertrophy of reticulo endothelial system.

HABITAT

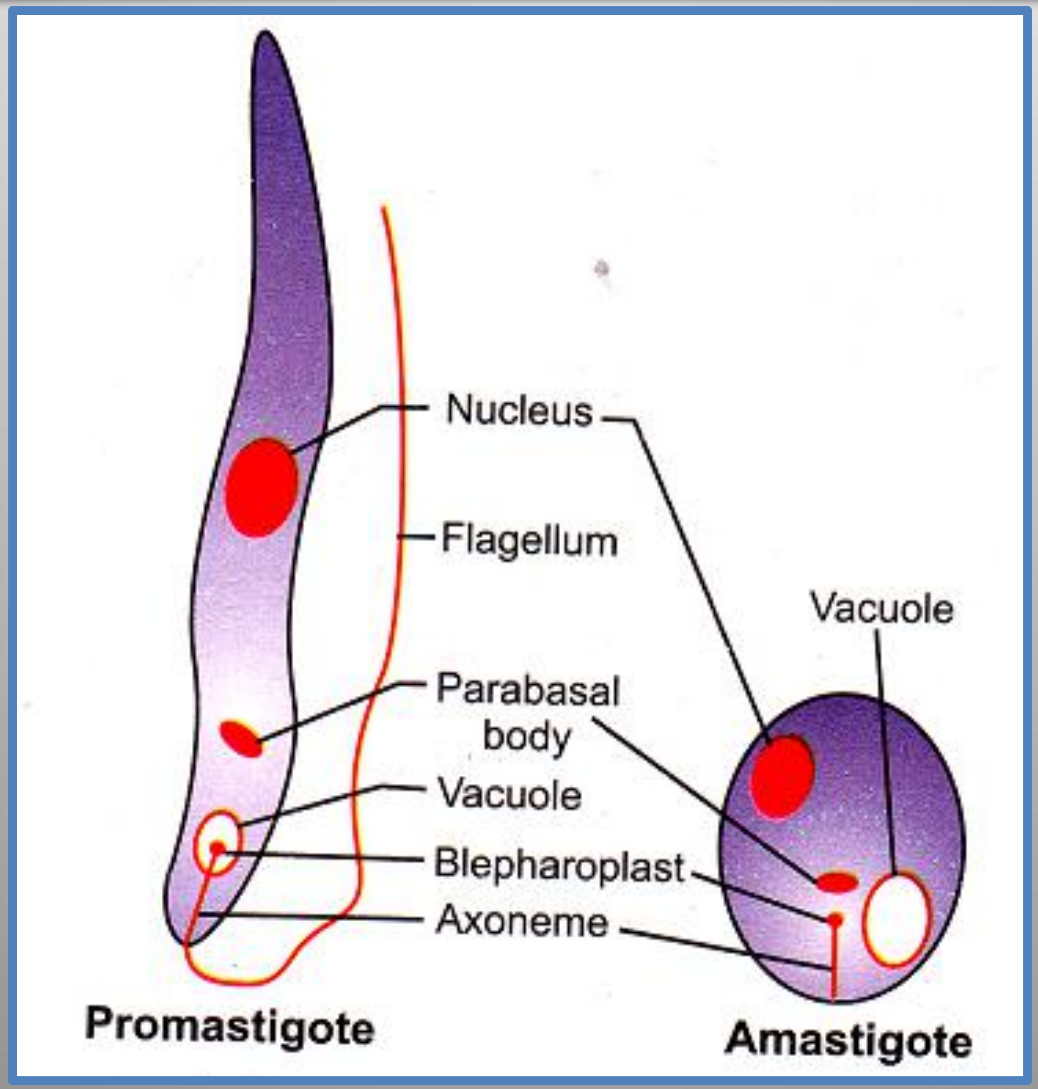
- It is an obligate intracellular parasite of reticulo -endothelial cells, predominantly of liver, spleen bone marrow and lymph nodes of man & other vertebrate host (dogs, hamster).
- Amastigote

MORPHOLOGY

This parasite exists in 2 forms;

- Amastigote – occurs in man.
- Promastigote – occurs in gut of insect (sandfly) and culture.

MORPHOLOGY


Nucleus
Flagellum
Vacuole
Parabasal body
Vacuole
Blepharoplast
Axoneme
Promastigote
Amastigote

LIFE CYCLE

- Two vertebrate hosts -- Man & dog
- Invertebrate host --Female sand fly of genus Phlebotomus.
- Important sand fly hosts include;

I. P. argentipes

II. P. orientalis

III. P. martini

packed with the parasites. The host-cell is thereby enlarged and eventually ruptures (as many as 50 to 200 or even more may be found embedded in the cytoplasm of the

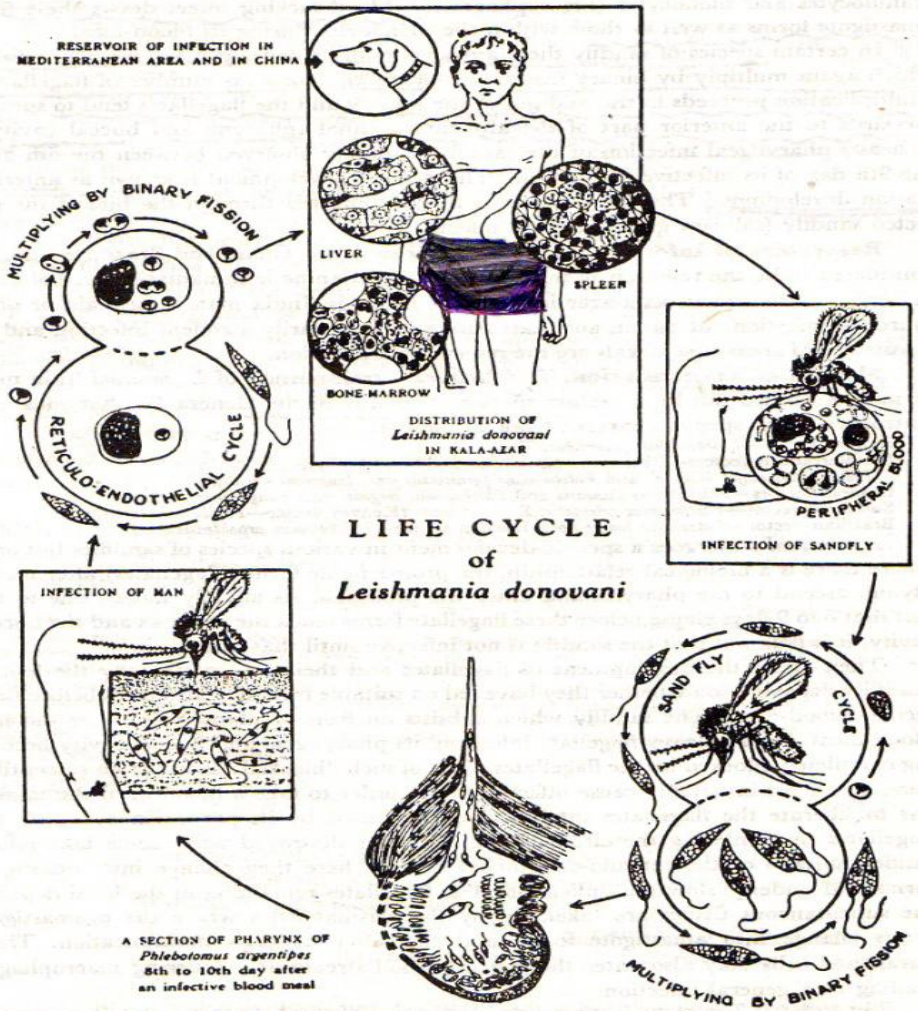


Fig. 51—Development stages of *L. donovani* in man and sandfly.

enlarged host-cell). The parasites liberated as a result of the rupture into the circulation are again either taken up by, or invade fresh cells and the cycle is repeated.

MODE OF TRANSMISSION

- By bite of sand fly.