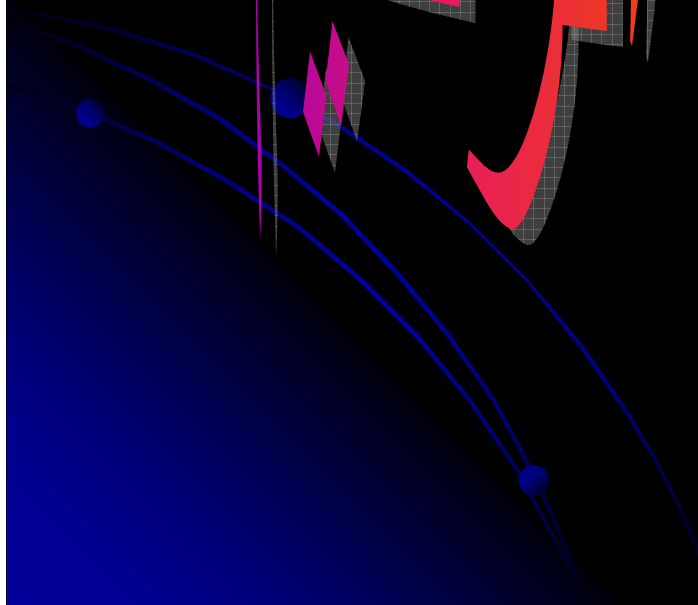
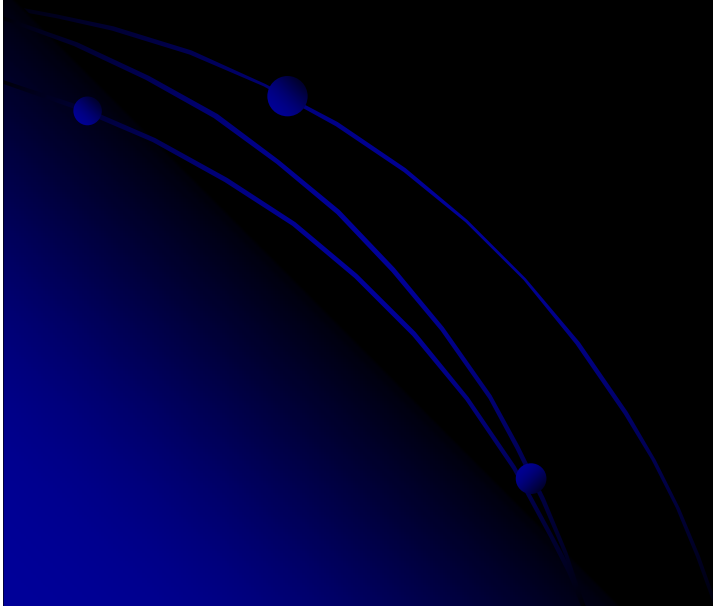


بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



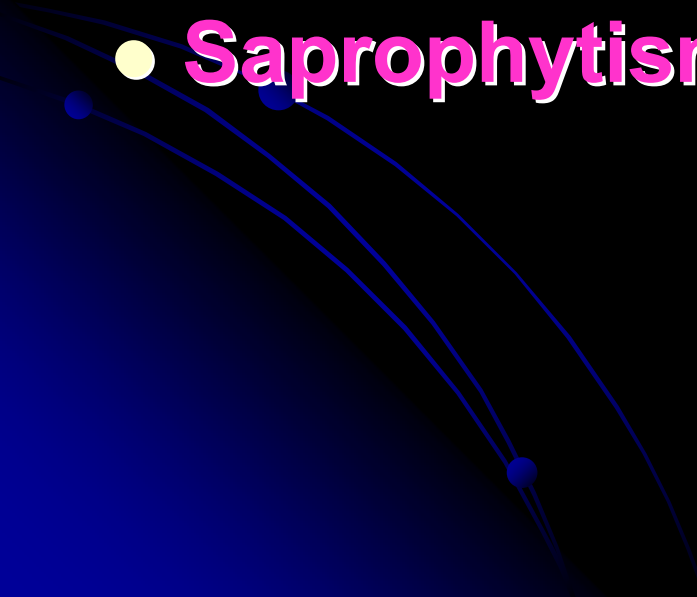
MEDICAL PARASITOLOGY



MEDICALLY IMPORTANT PROTOZOIRS

Glossary

- Parasitology
- Parasite
- Host
- Intermediate host
- Final host
- Monoxenous
- Heteroxenous
- Larve
- Vector

- **Symbiosis**
 - **Commensalisms**
 - **Mutualism**
 - **Parasitism**
 - **Saprophytisme**
- 

Type of parasites

- ▶ **Ectoparasites (Ectozoa)**

Exp: louse, tick, mite, flea.

- ▶ **Endoparasites (Entozoa)**

Exp: plasmodium sp.

- ▶ **facultative parasites**

Exp: microscopic mould.

- ▶ **accidental (occasional) parasites**

Exp: myriapode.

Type of parasites

- ▶ **Obligatory parasites**

Exp: plasmodium sp.

- ▶ **Permanent parasites**

Exp: itch mites.

- ▶ **Temporary parasites**

Exp: flea, mosquito.

- ▶ **Periodic parasites**

Exp: Ankylostoma duodenalis.

Type of parasites

- ▶ **Erratic parasites**

Exp: Ascaris into fallopian tubes.

- ▶ **Specific parasites**

Exp: Ascaris.

Nomenclature of parasites

Genus + species

Exp: Ascaris Iumbricoides Linnaeus.

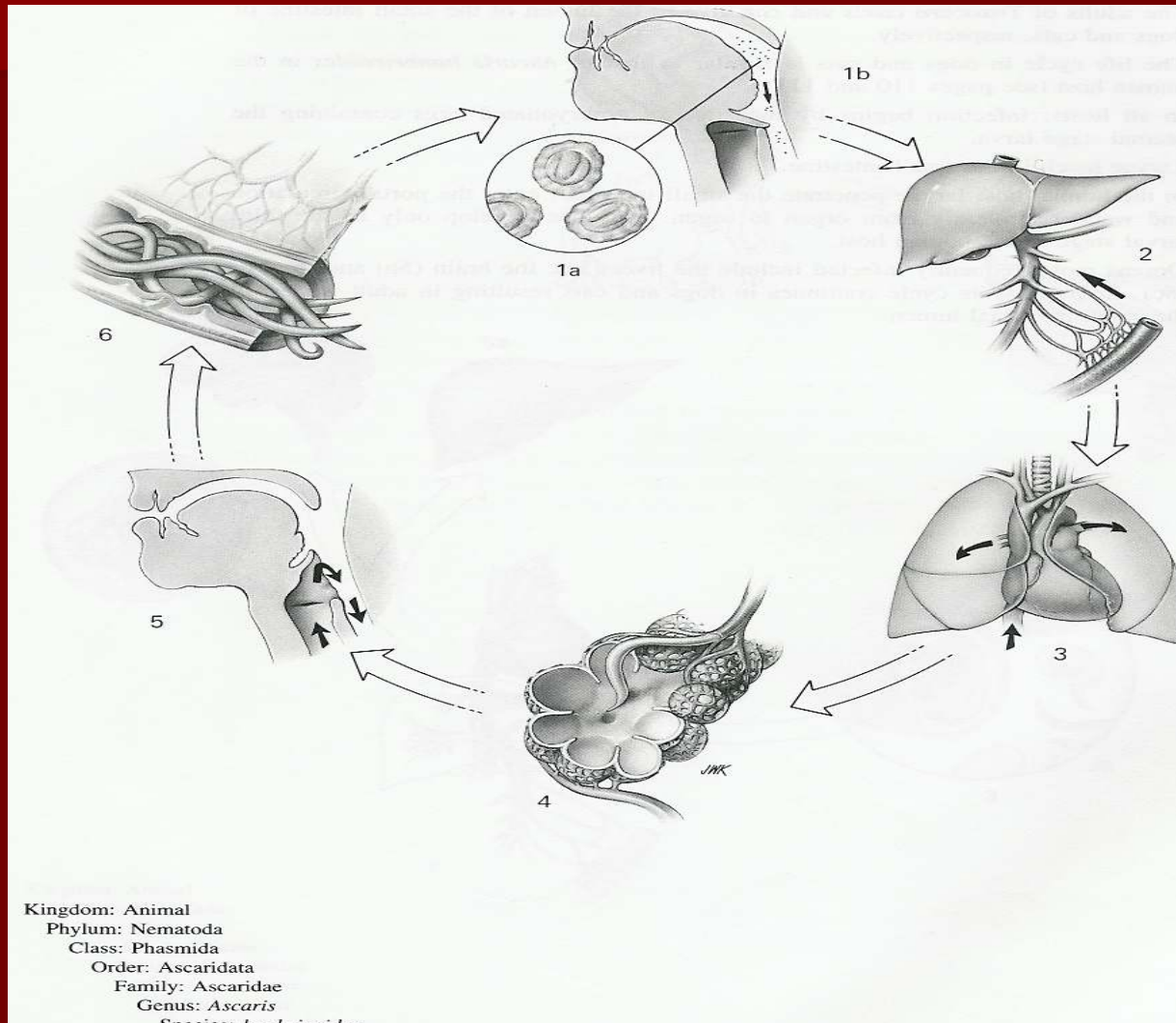
Studying methods of parasites

- Important point for studying of a parasites.
- ☺ Discovery history of a parasite.
- ☺ Geographic distribution.
- ☺ Inhabit of parasites in host body.
- ☺ Morphology of parasites.
- ☺ Life cycle of parasites.
- ☺ Situation of infection.

Studying methods of parasites

- ☺ **parasite effect on host.**
- ☺ **body reaction against parasites.**
- ☺ **diagnostic methods of parasites.**
- ☺ **treatment .**
- ☺ **prevention of parasitic disease.**

Life cycle of parasites



How to study an infection?

- **Important point of parasitic infection.**
 - 1- Transmission**
 - 2- Entry way.**
 - 3- parasites spreading.**

General methods of transmission

- ☐ **Contaminated food and water.**

Exp: amoeba , T- *Saginata*

- ☐ **Skin contamination.**

Exp: larvae of *ankylostoma*.

- ☐ **bite of mosquito.**



Effects of Parasites on human body

↑ Toxic effects:

Exp: mosquito and Ascaris

↑ Prohibitive effects:

Exp: Ankylostoma or Ascaris

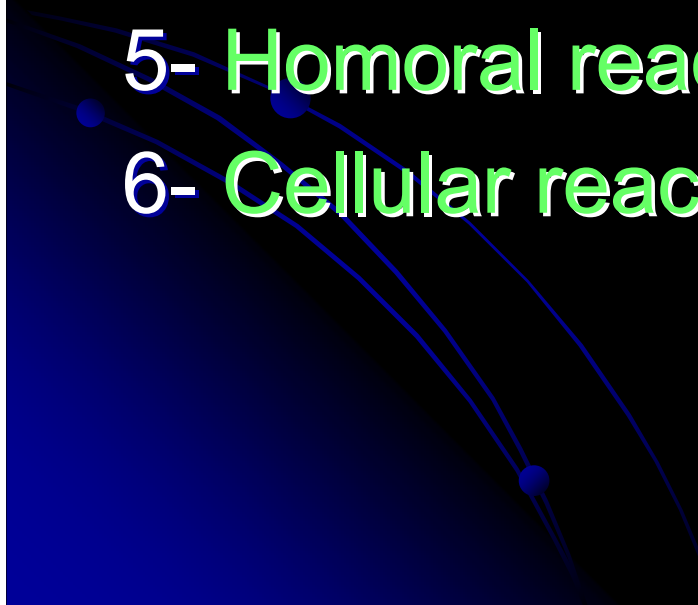
↑ Irritable and inflammatory effects:

Exp: E . Histolytica

↑ mechanical effects:

Exp: Ascaris

Body reaction against parasites

- 1- Phagocytosis
 - 2- Eosinophilia
 - 3- Tumoric reaction (liver abscess)
 - 4- Cystic reaction (liver hydatid cyst)
 - 5- Humoral reaction
 - 6- Cellular reaction
- 

Body syndromes against parasites

- Heat syndromes: (malaria)
- Dysenteric syndromes: (amoebiasis)
- Hepatic syndromes: (hydatid cyst)
- Skin syndromes: (leishmania)

Diagnosis of parasitic diseases


Direct diagnosis:

- ▶ **Blood:** plasmodium, trypanosoma, microfilaria by (**Giemza**)
- ▶ **L.C.R:** trypanosome and toxoplasma.
- ▶ **Sputum:** paragonimus westermanii.
- ▶ **Mouth:** Amoeba gingivalis and mycoses.
- ▶ **Duodenal intubation:** Giardia and trematode eggs

Direct diagnosis

- **Stool**: protozoaire cyst and trophozoite, egg of ascaris ,oxyure, ankylostoma, taenias, schistosomas, fasciola hp and buski
- **Macroscopic**: Adult of ascaris and oxyure, Segments of taenias
- **Urine**: eggs of S- haematobium.
- **Secretion of vagina**: trichomonas vaginalis
- **Skin biopsy**: lieshmania.

Indirect diagnosis

- **Serologic test** : Fleig precipitation for hydatid kyst.
 - **Skin test** : Casoni test for hydatid kyst and Montenegro test for lieshmaniasis.
 - **Immunofluorescence**: antigen - antibody
- 

Treatment of parasitic disease

- 😊 **Specific drugs**
- 😊 **Antibiotics**
- 😊 Drug **tendency for destroy** of parasites.
- 😊 **Full treatment**

Prophylaxis of parasitic disease

↑ hygiene.

↑ Control of infection source (infect individual)

↑ **Insecticide drugs:** Malathion, Toxaphen, Crotamin, Oldrin, Lindan, Pyrethrine, Chlordane and DDT

Classification of parasites

