



كلية الرشيد الجامعة

قسم تقنيات المختبرات الطبية

الطفيليات الطبية

Toxoplasma Gondii

المرحلة الثانية – النظري

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Toxoplasma Gondii

Morphology

toxoplasma gondii occurs in 3 forms :

A. Bradyzoite (tissue syst)

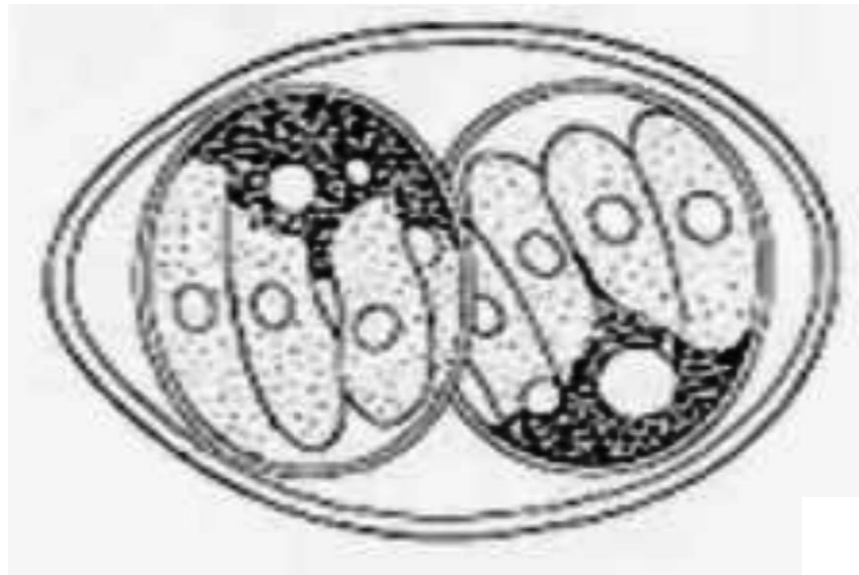
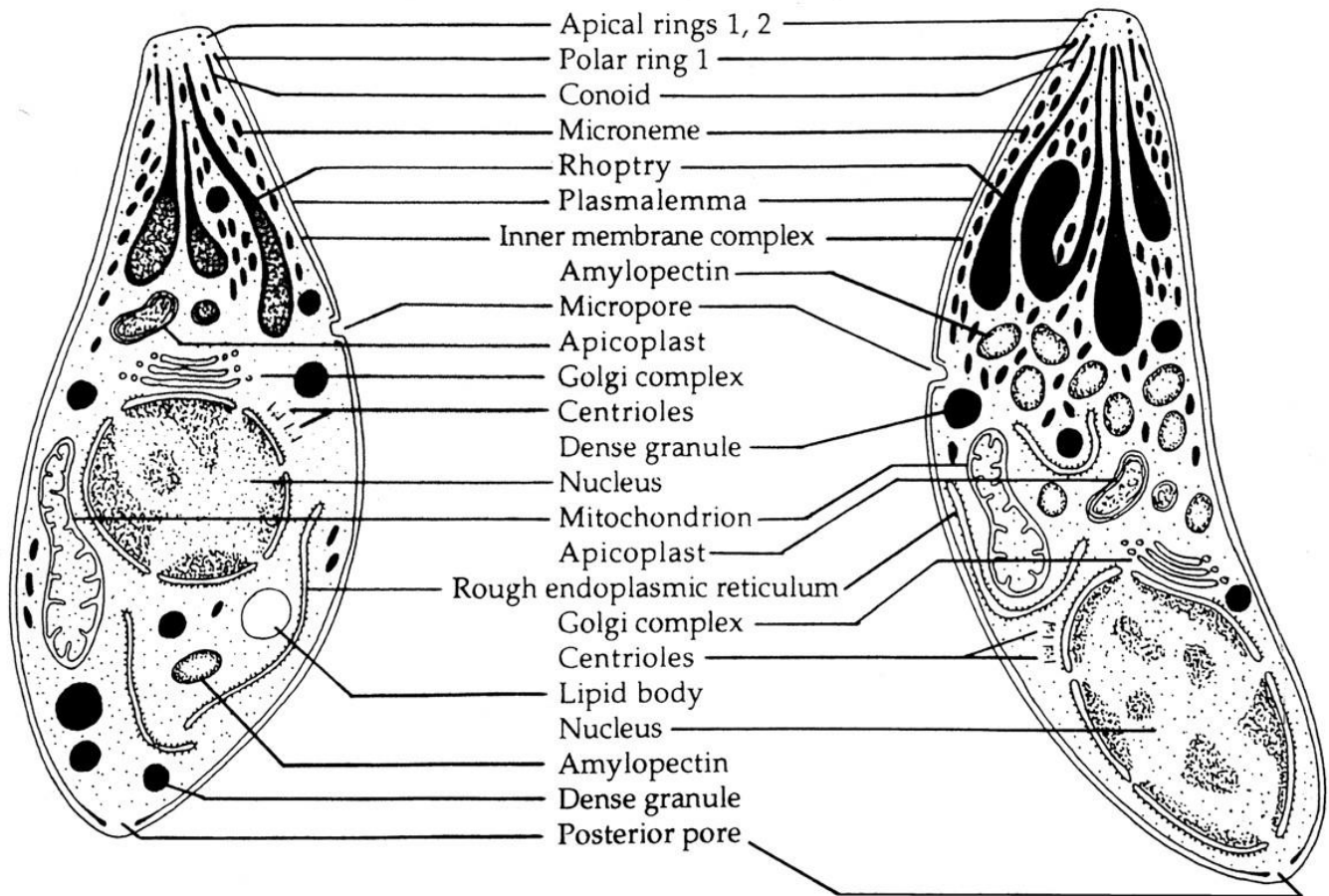
- ❖ Crescent shaped
- ❖ Center nucleus
- ❖ Slow growing stage
- ❖ Chronic phase of infection

B. Tachyzoite (Trophozoite)

- ❖ Crescent shaped
- ❖ **Nucleus is near the rounded end**
- ❖ **Rapidly** growing stage
- ❖ **Acute** phase of infection

C. Oocyst

- ❖ **Oval shape**
 - ❖ **Contains 2 sporocystes each contains 4 sporozoites**
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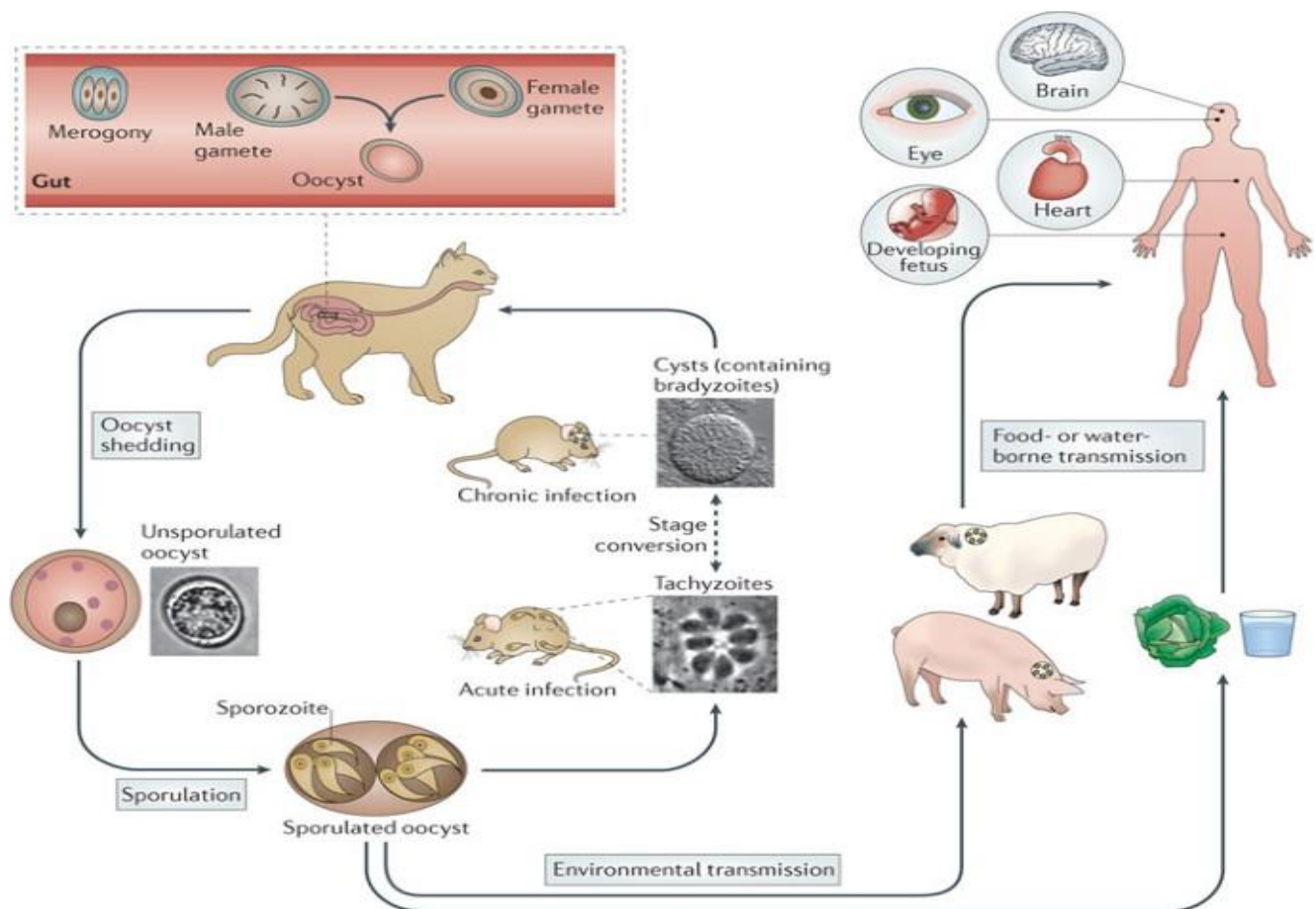
life cycle

toxoplasma gondii completes its life cycle in 2 hosts:

Definitive host: Cats and other felines, in which sexual cycle takes place .

Intermediate hosts: Man and other mammals, in which only the asexual cycle takes place

Causes: toxoplasmosis



Humans acquire infection after:

- Eating uncooked or undercooked infected meat, particularly lamb and pork containing tissue cysts
- Ingestion of mature oocysts through food, water, or fingers contaminated with cat feces directly or indirectly
- Intrauterine infection from mother to fetus (**congenital toxoplasmosis**)
- Blood transfusion or transplantation from infected donors.

Pathogenesis

- The disease picture : fever – headache – myalgia lymphadenitis – extreme fatigue.
- Abortion in the first trimester.
- Congenital defects : hydrocephalus – microcephalus – intracerebral calcification.
- In a very few cases retinochoroiditis occurs which may progress to produce blindness .

Diagnosis

- Direct microscopic examination.
- Latex agglutination test (LAT).
- Enzyme linked immune sorbent assay (ELISA).
- Polymerase chain reaction (PCR).