

Cryptosporidium parvum

Morphology

Oocyst

Rounded 4-6um in size ,contains 4 sporozoites Two types of oocysts: Thick walled oocyst(Has double wall membrane) commonly excreted with feces and thin walled oocyst (20%)involved in internal autoinfection .



Life cycle

- The parasite complete its life cycle, sexual and asexual phases in a single host
- Definitive host: Man.
- Reservoirs: Man, cattle, cat, and dog.
- Mode of transmission: Man acquires infection by: Ingestion of food and water contaminated with feces containing oocysts Autoinfection.
- Infective stage : oocysts
- Habitat :in the small intestine. It may also be found in stomach, appendix, colon and rectum
- Disease : cryptosporidiosis



Pathogenesis

Cryptosporidium causes diarrhea worldwide, for large outbreaks of diarrhea caused by Cryptosporidium are attributed to inadequate purification of drinking water. The disease in immunocompromized patients presents primarily as a watery, non-bloody diarrhea causing large fluid loss. Symptoms persist for long periods in immunocompromized patients, whereas selflimited in immunocompetent individuals. Although immunocompromized patients usually do not die of cryptosporidiosis, the fluid loss and malnutrition are severely debilitating

Diagnosis

by finding oocysts in fecal smears when using a modified Kinyoum acid–fast stain