

Clinical pathology

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Identify the sample

A. Direct life cycle All stages of the life cycle in one host (No intermediate host): Ex . Ascaris (Ova-----Larvae1-----L2-----L3-----L4-----Adult ----- laying ova.

The adult stage of the parasite is found in the final host

Diagnosis in worm. Eggs from fecal sample final host.

B. Indirect life cycle: needing more than one host to complete the parasite's life cycle (Final & intermediate host) Ex. Echinococcosis in dog (final host). Hydatid cyst in ruminant & human (intermediate host).

Intermediate host: The adult stage does not exist.

Diagnosis of the parasites in Intermediate host by (clinical signs, blood examination, X-Ray, Ultrasound).

Diagnosis methods:

1. Clinical signs: Depending on the parasite's location in the host and whether the larva is migratory or not. If in the intestines such as Ascaris causes digestive disorders, diarrhea, loss of appetite, poor growth and colic in horses.

In the lung (Lung Worms), it causes coughing, sneezing, and difficulty breathing, nasal discharge.

2. Directed wet smear: We take 2-3 gram of fecal sample and dissolve with 10 ml of water, then filter it with several layers of gauze, take a drop of it and put it on a slide and cover with a glass slide (slide cover) and examined under the microscope .

3. Flotation technique: taking 2-3 gram of fecal sample and dissolve with 10 ml of water, then filter it with several layers of gauze, use centrifugation to concentrate the sample for 10 minutes. take a 2-3 ml from precipitate put in test tube a complete the volume of the tube with a saturated saline solution to the end, and then put a glass cover on the tube for 10-15 minutes. After that, the cover is lifted and placed on the slide and examined under the microscope.

4. sedimentation technique : fecal sample and dissolve with 10 ml of water and to centrifugation to concentrate the sample for . sediment of the sample and giving small amount for the exanimated under microscope