

Lung fluke *Paragonimus westermani*

Habitat : Lung in cyst like pockets.

D.H : Man I.H: 1st: Fresh water snail (*Semisulcospira*)

2nd: Fresh water crayfish or crabs.

Encysted metacercaria (I.S)

Diagnostic stage → egg in stool

Pathogenesis :

😭 Migration stage nonspecific symptoms:

😭 Adult worms in → lung → granulomatous reaction, fibrous capsule is formed surrounding worms and eggs

Leakage of metabolites → paroxysmal cough.

Leakage of eggs and ova → blood tinged sputum.

Symptomatology

Rupture of the cyst → pulmonary symptoms such as sputum (blood tinged with eggs)

Complications

pneumonia, bronchitis, abscess, pneumo-thorax, pleural effusion.

Chronic cases → Resembles tuberculosis.

Can cause extra pulmonary infections.

Laboratory Diagnosis

Direct

- Detection of eggs rusty sputum.
- Detection of eggs in stool.
- Chest X-ray & CT.
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Indirect

- Serological tests → ELISA.
- Eosinophilia.

7) Which of the followings is INCORRECT regarding *P. westermani*?

- a. Habituating lungs in cyst like pockets
- b. The parasite infestation only affects lungs
- c. Chronic cases resemble pulmonary tuberculosis
- d. Pneumonia, bronchitis, and lung abscess in complicated cases
- e. Eosinophilia

Echinococcus granulosus

Hydatid worm

Habitat: Small intestine of the D.H.

D.H: Dogs, foxes and other canines.

I.H: Sheep, cattle, pigs and occasionally man.

Egg of *E. granulosus* → I.S to man

Diagnostic stage → hydated cyst

Mode of infection

Ingestion of eggs with food or drinks contaminated with dogs faeces .

Pathogenesis

Local inflammatory reaction → formation of a fibrous capsule which may become calcified or even ossified.

The symptoms depend on the size & site of the cyst.

Spontaneous rupture of the cyst → severe allergic reaction (anaphylactic shock) .

Clinical pictures:

Mainly asymptomatic

Complication occurs as a result of cyst enlargement & its rupture

Diagnosis

Clinical: → → History

Laboratory:

Direct:

X-ray for calcified cyst.

Ultrasonography, CT scan and MRI.

Scolices in sputum due to rupture of the cyst.

Puncture & aspiration of hydatid fluid → → may lead to anaphylactic shock due to leakage of the fluid.

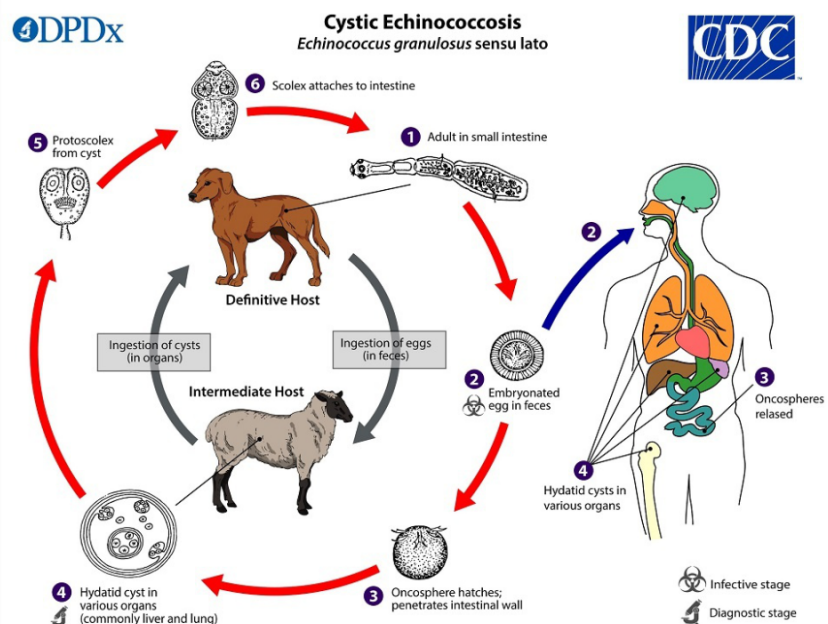
Indirect:

A. Intradermal test (Casoni test).

B. Serological tests

C. PCR.

D. Eosinophilia.



37) Which of the followings is INCORRECT regarding ~~Parvostomum~~ westermani?

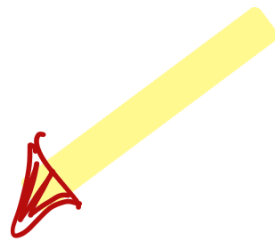
- a. Surgical removal of the cyst is the most efficient treatment
- b. Surgical removal excludes recurrence
- c. Treated by PAIR method
- d. Intradermal test (Casoni test)
- e. Calcified cyst can be seen by X-ray

42) Which of the followings is CORRECT regarding E. granulosus?

- a. The hydatid infection in human can be detected by stool analysis
- b. The egg in the sheep stool is infectious to human
- c. The hydatid cyst in the dog's tissue is formed after ingesting infected sheep
- d. Protoscolices are the infective stage to human
- e. Dogs are infected after ingesting cyst from infected goat

63) Semisulcospira is the infected stage of?

- a. Aspergillosis
- b. Hydatidosis
- c. Histoplasmosis
- d. Paragonimiasis
- e. E. granulosus



39) All are CORRECT regarding E. granulosus EXCEPT?

- a. The hydatid cyst in dogs is the source of eggs
- b. The size of the cyst is variable from 1 mm - 20 cm
- c. The daughter cysts are filled with protoscolices
- d. D.H are canines
- e. I.H: Sheep, cattle, pigs and occasionally man