NC STATE UNIVERSITY

Veterinary Parasitology

Fluke
Answers

Question

Regarding Clinical Signs: what other helminth disease does fascioliasis resemble?

(CS: Ruminant Host. Weakness, anemic pallor, bottle jaw.)

A. Cyathostominiasis
B. Haemonchosis
C. Babesiosis
D. Toxoplasmosis
E. Coccidiosis

Question

- **Matching**: *Fasciola hepatica* and *Haemonchus contortus* are parasitic worms of ruminants. Match each of these parasitic worms with the appropriate association.

C	1. Anemia	A. *Haemonchus contortus*
A	2. Nematode	B. *Fasciola hepatica*
B	3. Bile ducts	C. Both
B	4. Sedimentation	
C	5. Bottle Jaw	
A	6. McMasters	

Question

- **Matching**: *Fasciola hepatica* may present as Acute fascioliasis or Chronic fascioliasis. Match each of these presentation with the appropriate association.

B **1**. Eggs in feces	A. Acute fascioliasis
B **2**. Adult worms	B. Chronic fascioliasis
A **3**. Traumatic hepatitis	
B **4**. Stenotic bile ducts	
A **5**. Migrating juvenile worms	
A **6**. Unwilling to stand / sudden death	

Question

What bacterium is associated with *Fasciola hepatica* and causes black disease in sheep & goats?

A. *Staphlococcus aureus*
B. *Streptococcus mutans*
C. *Proteus mirabilis*
D. *Clostridium novyi*
E. *Escherichia coli*

Question

- Regarding a goat infection with *Fascioloides magna*, would one find eggs in a fecal sedimentation ?

A. Yes, patent adults in the bile ducts

B. No, death by migrating juvenile flukes

Question

- **Matching**: *Fasciola hepatica* and *Fascioloides magna* are parasites of ruminants. Match each of these parasitic worms with the appropriate association.

C	**1.** Sudden death	A. *Fasciola hepatica*
A	**2.** Bile ducts	B. *Fascioloides magna*
B	**3.** North Carolina	C. Both
A	**4.** Sheep definitive host	
B	**5.** Goat dead-end host	
C	**6.** Wet pastures / ponds	

Question

Which liver fluke causes a chronic wasting pathology in small ruminants, resulting in decreased productivity in older animals?

A. *Dicrocoelium*

B. *Paragonimus*

C. *Nanophyetus*

D. *Fascioloides*

Question

- **Matching**: *Fasciola hepatica, Fascioloides magna & Dicrocoelium dendriticum* are liver flukes of ruminants. Match each of these parasitic worms with the appropriate association. (some blanks may have more than one letter)

B,C	1. Zoonotic	A. *Fascioloides*
C	2. Ants	B. *Fasciola*
B,C	3. Bile ducts	C. *Dicrocoelium*
A,B	4. Aquatic vegetation	
C	5. Pennsylvania	
B,C	6. Sedimentation for sheep	

Question

In goats, which 2 liver flukes can cause sudden death from acute hepatitis due to migrations of juvenile worms?

A. *Dicrocoelium & Fasciola*

B. *Fasciola & Fascioloides*

C. *Paragonimus & Nanophyetus*

Question

In sheep, which 2 liver flukes can cause decreased productivity due to chronic damage caused by adult worm activity in the bile ducts?

A. *Dicrocoelium & Fasciola*

B. *Fasciola & Fascioloides*

C. *Paragonimus & Nanophyetus*

Question

Second Intermediate Host: One often controls fluke infections by not allowing access to the 2nd intermediate host. Match the Fluke with its 2nd intermediate host.

D	1. *Fasciola*	A. Crayfish
E	2. *Heterobilharzia*	B. Snail
C	3. *Dicrocoelium*	C. Ant
A	4. *Paragonimus*	D. Aquatic Vegetation
D	5. *Fascioloides*	E. No 2nd intermediate host
B	6. First Intermediate host	

Question

Disease Carriers: Some flukes carry / induce other disease pathogens. Match the fluke with its associated characteristics .

__C__ **1.** Potomac Horse fever

__A__ **2.** Canids

__A__ **3.** Raw *Fish*

__B__ **4.** *Clostridium novyi*

__A__ **5.** *Neorickettsia helminthica*

__B__ **6.** Red Water Fever

__C__ **7.** Bats

A. *Nanophyetus salmincola*

B. *Fasciola hepatica*

C. *Acanthatrium oregonensis*

Question

Which is the standard diagnostic technique when trematode parasites are suspect?

A. McMasters
B. Fecal Float Centrifugation
C. Passive Fecal Float
D. Fecal Sedimentation
E. FAMACHA

Question

1. What is the ecological relationship between the definitive host and the intermediate host of most digenetic trematodes (and cestodes)?

Predator / Prey relationship
Predation

Question

2. Which one of the following is a good general statement about the life cycle of digenetic trematodes ?

A. The infective (metacercarial) stage always encysts on aquatic vegetation.

B. The miracidial stage is always aquatic: hatching from the ova and swimming to its next host.

C. A snail intermediate host is required.

D. The second intermediate host is always a vertebrate.

E. The adult fluke is always found in the small intestine of the definitive host.