

***Fasciola hepatica* in Ovines: A Case Report**

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INTRODUCTION

Fasciolosis is a parasitic disease with high economic impact that strikes most domestic ruminants. It is caused by two species: *Fasciola hepatica* and *Fasciola gigantica* (Trematode class), and it causes considerable economic losses to the livestock industry, particularly due to the increased costs of anthelmintic treatment and mortality, with ensuing decreased meat, wool and milk yields. The global losses caused by Fasciolosis to animal productivity are estimated in USD \$ 3.200 millions a year (Thanh, 2012), with a total of 600 millions animals infected in rural farms, and from commercial farmers (Ramajo, Oleaga, Casanueva, Hillyer and Muro, 2001).

Post mortem diagnostic to the animals is based on verification of the presence of immature or adult trematodes in the parenchyma, biliary conduits and vessicle. Egg analysis is made by cropology. Parasitological methods are simpler, faster and more cost-effective. However, their low sensitivity is a real problem for epidemiological studies (Thanh, 2012). In addition, when the disease is in the acute phase, the parasite migrates through the liver parenchyma before reaching sexual maturity, and the results may be negative (Sánchez-Andrade *et al.*, 2000).

DEVELOPMENT

On October 3rd 2014, analysis was performed on a farm near the University of Camagüey, Cuba, based on suspicion of *Fasciola presence*, when a farm owner expressed concerns. The handling conditions over anamnesis were observed to be poor, (over-crowded, filthy and humid resting places). Over crowdedness of sick animals helps increase stress. The water supply was a small reservoir with a lot of snails (*Lymnaea cubensis*).

During the clinical exam sub-mandibular edema, weight loss, dimmer hair, pale eye mucosa, and low respiratory frequency were observed. At the time, rectal temperature was 38° C. Signs of pain and increased liver size were observed during abdominal palpation, which were considered as acute swelling of the liver, particularly caused by a massive migration of larvae, or due to some parasitic infection. The owner noted that the animal was weak before the treatment.

Because of the consequences this case might have for the rest of the herd in the surrounding areas, a cropological diagnosis was performed by HPG, using the McMaster technique, with ZnCl₂ floating in 1.5 density. It helped determine the presence of large numbers of *Fasciola* eggs. On the next day, Albendazole (10 mg/kg) was administered orally.

At 21 days, the ovine suffered from ataxia, accompanied by the above mentioned clinical manifestations. The animal was observed to have dyspnea and little appetite; hence the suspicion of infectious hepatitis increased. As a result of it, the owner decided to sacrifice the animal. The anatomopathological exam showed that the liver was very dilated, with abundant fibrinous exudate in the ventral lobe, along with thickening and calcification of the biliary conduits, and abundant bloody fluids in the abdomen, followed by hemorrhages. The liver parenchyma had diffuse hemorrhagic focuses, and abundant immature forms of the parasite.

As a matter of fact, in Cuba, the climate conditions favor *Fasciola hepatica* development all the year.

The presence of immature nematodes at the time of parasite desinfection must not be completely excluded as the cause of treatment failure.

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