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# FASCIOLOSIS IN FARM ANIMALS

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## ABSTRACT

Fasciola hepatica is a parasite that effect and lives in the body of cattle and sheep and affect them. This is the cause of fasciolosis in farm animals and cause severe production losses. This is the major cause of production losses, low milk yield and high economic losses for farmers. We must work to control this parasite to reduce the losses.

**Introduction:**

Millions of animals are affected by fasciolosis every year. It is caused by flatworms about the 30mm long and 15mm wide. It belongs to class Trematoda. In the animals its predilection site is liver of the host animal and most likely to affect other organs of the body (3). Fasciolosis can cause chronic illness in animals, weight loss, decreased milk production, and even death in severe cases (1). It causes huge losses in the form of production loss, cost of treatment, livestock trade restrictions and the food security (7).

**Life Cycle**

In host body adult female lay eggs in the bile duct of animals like cattle's and other ruminants. These eggs come out of the body of host through feases. Eggs hatched in environment and miracidia which are the larva of *F. hepatica* comes out and start floating. Snail acts as intermediate host and next developmental stages completed here (6). As the cercaria released from the snail it spends a short duration of life in water and encyst on vegetation as metacercaria now this metacercaria is ready to ingest by final host. Final host which feed or drink water from the water body where these metacercaria released get infected by *F. hepatica*. Now these juvenile flukes are ready to migrate towards the liver and cause disease on maturation. As they convert into adult, they feed on blood and lay eggs.

**Signs and Symptoms**

The major symptoms are weight loss and cause a decrease in appetite and likely to have low milk production, which can lead to serious disorders in the body (4). This weight loss majorly disturbs the pregnancy period and in future difficulties in conception. Another health problem caused by *F. hepatica* is anemia. The parasite feeds on blood and causes a decrease in several red blood cells. This can cause pale mucous membranes, weakness, and lethargy in affected animals. Severe hypertension, if left untreated, can have serious consequences for the animal's overall health and development. Liver damage is also a major problem when it comes to hepatitis. This parasite can cause the inflammation and scaring in the liver: [5].

**Diagnosis**

Early diagnosis and effective treatment important to overcome and reduce the production losses. Diagnosis is difficult at the early age, but some test and techniques are used to detect the fasciolosis vets use Faecal Egg Count (FEG), the best method used in diagnosis. Faecal sample is collected from the animal and observe it under microscope. Blood test is the other methd to diagnose the disease by observing the antibiotic levels (1).

**Economic effect of fasciolosis on farmers:**

This parasite resides inside the liver and destroy the liver structures and cause abnormalities (5). This is the reason of weight loss decreased milk production, and decreased overall livestock production which is a disadvantage to the economy. As a result, no gain for farmers.

**Tips to maintain a healthy environment to reduce the risk of fasciolosis**

**Pasture Management:** Check your food regularly for signs of fasciolosis. Watch out for wet, diseased areas or standing water that can be breeding grounds for liverworts. Use water appropriately to eliminate standing water and reduce the risk of contamination.

**Fencing and rotational grazing:** Use rotational grazing to prevent overgrazing and concentration of snail disease in certain areas. Maintain farm areas to prevent animals from entering high-risk areas.

**Strategic Dosing:** Work with your veterinarian to develop a dosing plan that suits your farm's unique needs. The presence of an intermediate host is snail important for the transmission of *F. hepatica* so understanding the control between snail and parasite (2).

**Conclusion**

Conclusively, taking important steps to prevent and treat mental illness, farmers can protect their animals from unnecessary suffering and financial loss. Regular monitoring, proper land management, and the use of anthelmintic drugs are crucial to control the spread of the disease. It is also important to make farmers aware of the signs and symptoms of *F.hepatica.* Early diagnosis allows for timely intervention and effective treatment, reducing the impact on the overall health and productivity of farm animals.

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