

Case Report

Identification of *Ostertagia Ostertagi* in Cattle with Persistent Diarrhea

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ABSTRACT

This report is about the identification of parasite *Ostertagia ostertagi* in cattle with persistent diarrhea. A Farmer brought the fecal samples to National Veterinary Laboratories, Islamabad from the Village "Charaa", Islamabad. He was having total of four animals including one cattle and three calves. Cattle approximately 8 year old and have persistent diarrhea with the interval of 2 months after microscopic fecal examination it was confirmed that animal was infested by *Ostertagia ostertagi*.

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INTRODUCTION

Ostertagia ostertagi also known as brown stomach worm its distribution is worldwide in cattle raising areas. It leads to weight loss, severe diarrhea, edema and emaciation in affected animals. It is common cause of parasitic diarrhea in cattle and also suppresses immune response (Kaufmann, 1996).

Charra is village area near Islamabad in that area house farming is common and due to negligence of farmer parasitic infestation is very much common. Studies conducted in different village areas in Pakistan (Maurad *et al.*, 1985; Amir, 1994; Bilal *et al.*, 2009) proves that animals in villages are much prone to parasitic troubles.

Case History

Cattle's body condition was normal. All physical parameters like temperature were normal. The Feed and Water intake was normal but there is slight decrease in Milk production. Last time de-worming was carried out approximately seven (07) months ago and the sanitary conditions around animals were also compromised.

Diarrhea with no fever leads towards parasitic infestation. Weather and hygienic condition of the discussed area were also favorable for parasites to grow and cause infections and as owner is not de-worming the animals regularly.

PROCEDURE AND RESULTS

It was suspected that the disease might be due to parasitic infestation so the fecal examination was performed. Color and consistency of sample was normal then sample was processed and screened by direct smear method in which first a small amount of fresh fecal material was placed on slide then added one drop of saline and mixed it thoroughly with match stick then cover-slip was placed over it and examined under compound microscope at 10X. Ova of parasites were visible and then identified through their morphological features (Soulsby, 1982). On identification through key provided in the literature, it was found that the eggs belong to parasite "*Ostertagia ostertagi*".

For parasitic infestation, Levamisole was prescribed (Hunjra, 1991). Also to prevent the water and mineral loss due to diarrhea, Sulphadimidine was given. The owner was advised to maintain hygienic environment around animals for better production carry on regular de-worming to avoid future parasitic troubles.

DISCUSSION

Ostertagia Ostertagi is a thin and called Brown stomach worm (trichostrongyloidea). Generally found in abomasums and occasionally in intestine. Its adult size is about 6-10mm in abomasum. The size of the eggs is 80µm × 45 µm. These parasites normally cause the severe diarrhea and sever loss of weight (Tawfic, 1978).

The prevalence of *Ostertagia Ostertagi* in young calves was reported as much as 59.46 % in another study by Bilal *et al.*, (2009) so chances of occurrence of parasitic infestation were high if the animals are not regularly dewormed. It was surprising that the physical conditions and feed and water intake of animal was normal which is not usually seen in animals effected with this parasite.

In countries like Pakistan, one of the major reasons of animal's diseases is unawareness of farmers about the prevalent diseases in their areas.

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