OCCURENCE OF *OESTRUS* OVIS IN GOATS IN PALAKKAD, KERALA AND ITS SUCCESSFUL MANAGEMENT

Received: 08.05.2019
Accepted:20.05.2019

Oestrus ovis is a larviparous protelean fly whose larvae parasitize the nasal cavities and adjoining sinuses of sheep and goats. It is primarily a widespread infestation of sheep and rarely occurs in goat, camel, deer, reindeer, elk and ibex (Lapage, 1956; Das and Bhatia,1994). The larvae elicit clinical signs of cavitary myiasis seen as seromucous or mucopurulent nasal discharge, frequent sneezing, incoordination and dyspnoea (Madhu *et al.*, 2014). The migratory larvae may also penetrate and erode dorsal turbinate bones, frontal sinuses and occasionally the skull bones thereby entering into the cerebral cavity, causing false gid (Taylor *et al*., 2007). In India prevalence of *O. ovis* has been reported in several places (Chhabra and Ruprah, 1976 ; Jagannath *et al*., 1989 and Allaie *et al*., 2016). Myiasis has medical and public health significance if the incidental host is man (Sreejith *et al*., 2010). The present paper describes the occurrence of nasal myiasis from crossbred Malabari goats for the first time in Kerala and its successful medical management.

A three year old doe was presented to the Veterinary hospital, Kozhinjampara from a goat farm at Gopalapuram village, Palakkad with the complaint of frequent sneezing and coughing along with excess mucopurulent nasal discharge. The doe expelled a maggot while sneezing which was presented by the owner. Four other goats of the herd also had expelled the larvae. All the remaining goats of the herd also exhibited signs of occasional sneezing along with mucopurulent nasal discharge. General clinical examination of the doe revealed slightly pale mucus membrane and a rectal temperature of 102.6°F. On auscultation, tracheal rails and wheezing sounds were heard. The doe was treated with Tylosin (10mg/kg BW) and Deriphyllin (11mg/kg BW) intramuscularly OD for five days before the definitive diagnosis was made.

Parasitological examination of the larvae revealed that it was a maggot with 10 segments and a dark transverse band on the dorsal surface of each segment (Fig 1). The posterior spiracle was triangular with radiating slits which confirmed the maggot to be *O. ovis* (Soulsby, 1987). Once the nasal myiasis was confirmed, the infected goats in the herd were given single dose of Ivermectin (0.2mg/kg BW) subcutaneously. The symptoms disappeared by the 5th day of treatment.

The presence of *O. ovis* infestation in goat may be attributed to several factors especially lack of hygiene permitting the breeding of flies and proximity of the location to Tamil Nadu where the disease has been reported. However, the presence of nasal myiasis in Kerala signals the potential risks in spreading the disease during animal transport since the prepatent period is variable from a few

Fig.1 : Larvae of *Oestrus ovis*

weeks to several months. The use of suitable fly repellants and systemic insecticides such as avermectins in the fly active season could help in managing the occurrence and infestation of *O. ovis* in small ruminants.

Summary

The paper reports nasal myiasis due to *O. ovis* in a herd of crossbred Malabari goats from Gopalapuram village of Palakkad and its control using Ivermectin. Nasal myiasis had not been recorded from goats in the state. The incidence in the farm points out the possibility of recurrence in the fly breeding seasons. Hence strict control measures should be advocated in such pockets to prevent the fly infestation. Transport of animals from the region should also be done with extreme caution.

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