

Original Research Article

<https://doi.org/10.20546/ijcmas.2018.712.420>

## Incidence of Coccidiosis in Domestic Pigeons (*Columba livia*) - A Case Report

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### ABSTRACT

#### Keywords

Pigeons,  
Coccidiosis,  
*Eimeria spp*

#### Article Info

Accepted:  
30 November 2018  
Available Online:  
10 December 2018

A total of 40 faecal samples were examined from pigeons belonging to a pet owner at Chennai with the history of inappetance and blood tinged droppings. Microscopic examination of droppings revealed oocysts of *Eimeria spp*. The birds became active and alert with normal feeding habits after 7 days of treatment with amprolium soluble powder.

### Introduction

Coccidiosis caused by *Eimeria spp.* is a common parasitic disease posing a serious problem in pigeons. It is most commonly seen in young pigeons and only rarely in adult birds. About nine species of the genus *Eimeria* were described in these birds, but only three species are of significant, *Eimeria columbae*, *Eimeria columbarium* and *Eimeria labbeana*. The most pathogenic and frequently observed species is *E. labbeana*. Coccidiosis of pigeons may occasionally be seen in young squabs,

especially when reared intensively and when hygiene is poor, while older ones serve as carrier and remain apparently healthy. The prevalence of pigeon coccidiosis in different countries of the world is 50-100 % and mortality of 70% in juvenile pigeons (Balicka-Ramisz and Pilarczyk, 2014; Ali *et al.*, 2015). The common signs include hunched posture, ruffled feathers, bloody or mucoid diarrhea, yawning, paralysis, weight loss and poor performance in racing pigeons. Clinical disease is most commonly seen in juvenile pigeons, but a high burden of coccidia can

also adversely affect racing performance in adult pigeons (Junghanns *et al.*, 2009). The diagnosis can be confirmed on microscopic examination of droppings and the birds are treated with coccidiocidal drugs via feed or water. The present case reports an incidence of coccidiosis in domestic pigeons maintained by a pet owner in Chennai and effective treatment with amprolium.

### Materials and Methods

A total number of 40 pigeons belonging to a private owner at Chennai were reported with the history of inappetance and blood tinged droppings for the last 2 days.

The droppings were collected and subjected to microscopic examination. Based on the

laboratory findings, the birds were treated with amprolium soluble powder @ 5 gm per litre of water for 7 days.

### Results and Discussion

Physical examination of the pigeons revealed dullness (Fig. 1).

The droppings voided by the birds were greenish white with blood tinged and watery in consistency. Microscopic examination of droppings revealed the presence of oocysts of *Eimeria spp* (Fig. 2). Out of forty samples examined, thirty samples were found to be positive for *Eimeria spp*. The birds became active and alert with normal feeding habit after seven days of treatment.



**Fig.1** Pigeons – Dullness



**Fig.2** Pigeons- Droppings- *Eimeria* oocyst

The present paper records an incidence of 75% of *Eimeria spp.* in domestic pigeons. Kommu *et al.*, (2016) examined 370 faecal samples of pigeons and found 121 samples were positive for *Eimeria spp.* Marques *et al.*, (2007) reported an incidence of 86.05 % of coccidiosis in free living pigeons while an overall incidence of 19.44% and 33.3% in pigeons were reported by Mohammed *et al.*, (2017) and Sivajothi and Sudhakara Reddy (2015) respectively.

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**How to cite this article:**

Ramesh, S., C. Soundararajan, S. Subapriya, R. Sokkalingam and Muthukrishnan, S. 2018. Incidence of Coccidiosis in Domestic Pigeons (*Columba livia*) - A Case Report. *Int.J.Curr.Microbiol.App.Sci.* 7(12): 3698-3700. doi: <https://doi.org/10.20546/ijcmas.2018.712.420>