

## ASCARIASIS IN INDIAN PEAFOWL *PAVO CRISTATUS* CHICKS

T. Bhaskara Rao <sup>1</sup> and Md. Hafeez <sup>2</sup>

<sup>1</sup> Veterinary Biological and Research Institute, Samalkot, Andhra Pradesh 533440, India

<sup>2</sup> Dean of P.G. Studies, Acharya N.G. Ranga Agricultural University, Rajendra Nagar, Hyderabad, Andhra Pradesh 500030, India

Ascarid infection occurs in the small intestine of fowl, guinea fowl, turkey, goose and various wild birds (Soulsby, 1982) and the incidence of ascarid infection in Peafowls was earlier reported by Rao *et al.* (1981) and Muralidharan *et al.* (1990). The present communication reports incidence of ascariasis in pea fowl chicks in East Godavari district of Andhra Pradesh.

One dead and two ailing Indian Peafowl (*Pavo cristatus*) chicks aged 1 month were brought to Animal Health Center, Kakinada, A.P. from Nagarjuna Fertilizers and Chemicals Ltd., Green belt, Kakinada with a history that one chick was found dead in the pen and the two ailing chicks were showing weakness. On external examination of the dead chick no abnormality was detected. On postmortem examination, no gross lesions were seen externally.

On cutting open, the small intestine was found to contain nematodes and the lumen of the small intestine was completely occluded with several adult and young worms. Rupture of the small intestine was observed and both male and female worms were recovered from the intestine. Examination of the intestinal scrapings of the dead pea fowl chick and faecal samples of the ailing pea fowl chicks revealed characteristic *Ascaridia* eggs which are identical to the morphology described by Soulsby (1982).

Impression smears of visceral organs did not reveal any organisms of etiological importance. On cultural examination of heart blood and intestinal contents, no pathogenic organisms could be isolated. On histopathological examination, the mucosa of the small intestine showed cellular infiltration consisting of heterophils and the submucosa showed hyperplasia.

The chick may have died due to peritonitis caused by rupture of the small intestine with heavy number of *Ascaridia* worms. Lapage (1956) mentioned that the young birds may be heavily infected when they are 3-4 weeks old and they may die at an early age.

The ailing pea fowl chicks were treated with Albendazole oral suspension (Albomar-Agrivet Farm Care, Mumbai) @ 5mg/Kg body weight. No *Ascaridia* eggs could be detected on the examination of faecal samples of the treated pea fowl chicks on seventh and 14<sup>th</sup> day post treatment and the birds recovered.

### REFERENCES

- Lapage G. (1956). *Ascaridia galli*. Veterinary Parasitology, Oliver and Boyd, London, 175pp.
- Muralidharan, K., I. Vasanti, K.S. Ziauddin and K. Srinivasan (1990). A survey of gastrointestinal parasites of animals Zoological gardens at Mysore. *Mysore Journal of Agricultural Science* 24: 250-256.
- Rao, A.T., L.N. Acharjyo and M.M. Patnaik (1981). Pathology of ascariasis in a pea fowl (*Pavo cristatus*) and Caused by *Ascaridia perspicillum*, Rudolf

1803. *The Indian Veterinary Journal* 58(7): 585.

Soulsby, E.J.L. (1982). *Ascaridia galli* Helminths, Arthropods and Protozoa of domesticated animals. 7<sup>th</sup> edition. ELBS and Bailliere Tindall, London.



## ASCARIDIA COLUMBAE INFECTION IN A PIGEON *COLUMBA LIVIA*

T. Bhaskara Rao <sup>1</sup> and Md. Hafeez <sup>2</sup>

<sup>1</sup> Veterinary Biological and Research Institute, Samalkot, Andhra Pradesh 533440, India

<sup>2</sup> Dean of P.G. Studies, Acharya N.G. Ranga Agricultural University, Rajendra Nagar, Hyderabad, Andhra Pradesh 500030, India

*Ascaridia columbae* occurs in the small intestine of domestic and wild pigeons (Soulsby, 1982). The literature on the incidence of *A. columbae* infection is scanty, hence the present communication.

One pigeon (*Columba livia*) aged three months was brought to the Animal Health Centre, Kakinada, Andhra Pradesh from Nagarjuna Fertilizers and Chemicals Ltd., Green belt, Kakinada for necropsy examination after the bird was found dead in the pen. External examination revealed no abnormalities. Postmortem examination revealed no gross lesions.

On cutting open, the small intestine was found to contain nematodes and the lumen of the small intestine was completely occluded with several adult and young worms. Rupture of the small intestine was observed and both male and female worms were recovered from it. These worms were referable to *A. columbae* and the identification was confirmed by the Zoological Survey of India, Kolkata. Lapage (1956) mentioned that enormous numbers of *A. columbae* worms may be present without showing symptoms. The examination of faecal samples revealed *A. columbae* ova. Impression smears of visceral organs did not reveal any organisms of etiological importance. On cultural examination of heart blood and intestinal contents, no pathogenic organisms could be isolated. On histopathological examination, the mucosa of the small intestine showed cellular infiltration consisting of heterophils and the submucosa showed thickness.

The death may have been due to peritonitis caused by rupture of the small intestine occluded with a heavy number of *A. columbae* worms.

### REFERENCES

- Lapage, G. (1956). *Ascaridia columbae*. *Monnings Veterinary Helminthology and Entomology*, 4<sup>th</sup> edition. Bailliere Tindall and Cox, 7 and 8 Henrietta Street, Covent Garden, London, 160pp.
- Soulsby, E.J.L. (1982). *Ascaridia columbae*. *Helminths Arthropods and Protozoa of Domesticated Animals*, 7<sup>th</sup> edition. ELBS and Bailliere Tindall. London, 165pp.

