Helminth Parasites in Captive Wild Animals of Rajiv Gandhi Zoological Park

G.B. Shrikhande, Ashlesha K. Satpute, Suhasini S.Zanzad and D.K. Maske

Department of Epidermiology and Preventive Medicine. Nagpur veterinary college, Nagpur 440006, India

Abstract

The health status of Zoo animals varies with different factors such as management, feeding, environment, sanitation and season. The fecal sample of two male and three female white tiger, Four male and three female tiger and one female Wolf was examined for parasites as per standard technique. The faecal sample of one white tiger was found positive for *Spirometra sp.*, Faecal sample of six tigers were positive for *Toxoascaris sp.* and fecal sample one wolf was positive for *Paragonimus sp.*

Keywords: Helminth, Parasite, Captive wild animals, Zoological park, Faecal sample, Management.

Introduction

The spectrum of parasitic diseases in wild animals is of great importance both in human and veterinary medicine. Under captivity the health status of zoo animals varies with different factors such as management, feeding, environment, sanitation and seasonal variation. Various workers have recorded incidence of different parasites in captive wild animals (Maske, et al 1990; Chakraborthy et al 1994 and Kasid et al 2002).

Material and Methods

Two male and three female white tiger, seven tiger (four male and three female) 7 to 9 years of age group and one female wolf maintained at Rajiv Gandhi Zoological Park, Katraj, Maharashtra, were examined in the month of October 2007 with a history of anorexia and diarrhoea for two days. The parasitic eggs were identified on the basis of their morphology (Soulsby, 1982).

Result and Discussion

The faecal sample of one white tiger was found positive for eggs of *Spirometra spp*. It may be

reasonable to speculate that, the white tiger might have picked up infection when they are fed raw offals or meat from slaughted animals.

Out of seven tigers, (Panthera tigaris)six tigers were positive for eggs of *Toxoascaris sp*p. Infection of these tigers might be due to contamination of feed and water (Soulsby, 1982).

Fecal sample of one wolf was positive for eggs of *Paragonimus sp.* The wolf might be infected by eating infected crustacea (Marathe *et al* 2002).

References

- Chakraborty, A., Gogoi, A.R. and Choudhary, B. (1994): Int. J. Ani Sci. 9: 149-152.
- 2. Kashid, K.P.; Shrikhande, G.B. and Bojne, G.R. (2002): Zoos Print J. 18: 1053-1054.
- Marathe, R.R.; Goel., S.S; Ranade, S.P. Jog, M.M., and Watve M.G. (2002): BMC Ecology 2: 6
- 4. Maske D.K., Bhilegaonkar, N.G. and Sardey, M.R. (1990): Indian J. Anim. Sci. 5: 277-278.
- 5. Maske, D.K., Sardey M.R. and Bhilegaonkar N.G. (1990): Indian J. Anim Sci. 60: 952.
- Soulsby, E.J.L., (1982): Helminths, Arthropods and Protozoa of Domesticated animals. 7th Ed. ELBS and Bailliere Tindall, London.

Table-1. Faecal sample examination of Captive wild animals of Rajiv Gandhi Zoological Park

Sr. No.	Animal Species	Faecal sample examined	No. of Positive	Nature of Infection
1.	White tiger	5	1	Ova of Spirometra sp.
2.	Tiger (Panthera Tigaris)	7	6	Ova of Toxoascaris sp.
3.	Wolf	1	1	Ova of Paragonimus sp.