PARAGONIMIOSIS IN A LEOPARD
PANTHERA PARDUS

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Paragonimus westermanii is a trematode parasite found mainly in lungs and rarely in the brain, spinal cord and other organs of mammals including man (Fraser, 1986). The infection is important owing to its zoonotic nature. This paper presents a case of paragonimiosis in a Leopard (*Panthera pardus*) and its treatment.

During a routine quarterly faecal sample examination, ova of *Paragonimus* sp. was observed in a male Leopard named Gopal. Two more faecal samples of the same Leopard taken at an interval of one week also revealed the same. The history from the zoo keeper revealed that the Leopard had become less active and lean since the last three to four months, prefering to sit in a corner instead of his usual active movements in the cage, and had chronic occasional cough especially during morning hours. Based on faecal analysis, the condition was diagnosed as lung worm infestation. The Leopard was treated with albendazole at 50 mg/kg body weight daily for 15 days with beef. Nutrolin-B (B-complex with *Lactobacillus*) 5ml daily for 15 days was also given with beef. The faecal samples were again examined after seven, 14 and 21 days of completion of the treatment and did not reveal the parasitic ova.

The adult parasite is fleshy, reddish-brown, oval and measures l4 x 7mm. The eggs are golden-brown, oval and distinctly operculated and measure about 100 x 60mm (Fraser, 1986). The eggs pass through the ruptured cyst wall, are coughed up, swallowed, and passed with the faeces. The lifecycle includes snails as the first intermediate host and cray fish or crabs as the second. Canids and felids become infected by eating raw cray fish or crabs containing the encysted cercariae. After penetration of the intestinal wall and wandering in the peritoneal cavity, the young flukes pass through the diaphragm to the lungs where a cystic cavity is formed where the parasite matures to the adult stage. The infected animals may have a chronic intermittent cough, and eventually become weak and lethargic, although many infections may pass unnoticed (Fraser, 1986).

The presence of this parasite in wild felids is reported by several authors (Gaur *et al.*, 1980; Arora & Das, 1988; Maske *et al.*, 1990; Rao *et al.*, 1991). Rao and Acharjyo (1991) also reported this parasite at necropsy in the lungs of two Tigers, four mongooses and a Golden Cat. The said Leopard was acquired by the zoo from the state wildlife wing a few years back. The nullah flowing adjacent to the enclosure of the Leopard might have been the source of the intermediate hosts for the parasite.

Although the Leopard appeared normal and active after completion of the course of medicines it was difficult to say whether the infection was totally eliminated from the body as radiographic study of the lung or serological tests were not undertaken. Further study on this is essential.

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