**Explor. Anim. Med. Res., Vol. 1, Issue - 2, 2012. p- 184-186**

***Short Communication***

# *TOXOCARA CATI* INFESTATION IN FISHING KITTEN - A CASE REPORT

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*Toxocara cati* in domestic cat reported as a common helminthic infestation in different areas of the world but in wild variety specially in fishing cat ( *Felis viverrina*) is scanty. Kitten become infected from its worm loaded mother during gestation through transplacental transmission or by suckling of its mother's milk at early stage of life. And death may occur within first few months of life due to huge worm burden. *Toxocara cati* is migratory when infection occurs by ingestion of the L2 in the egg and non-migratory after transmammary infection with L3 or after ingestion of a paratenic host ( Urquhart *et al.* 1987 ). *Toxocara cati* is one of the most common endoparasites of captive carnivores and ascarid infections are most important in young animals ( Fowler 1993).

Two fishing kittens aged about 2 months were rescued on 20.11.2009 by Forest Department, West Bengal from North Kolkata area except its mother, as it flew away during operation. Both fishing kittens were brought to Disease Investigation Laboratory, Institute of Animal Health & Veterinary Biologicals ( R & T ), Kolkata on 24.11.2009. Both the kittens were found dull, depressed, off-fed, weak, dehydrated, poor coat, pale mucous membrane of eyes, soiled anal regions with slightly sub-normal body temperature. Microscopical examination of the faecal samples revealed huge numbers of eggs which are almost colourless, subglobular, thick, pitted shells , diameter 65 - 75 µm indistinguishable from *Toxocara* sp. Treatment was suggested with D.N.S, multi-vitamins, Betnisol drops, Albendazole oral suspension @ 10 mg / Kg body weight .

But one most debilited and affected kitten was suddenly died in next night, which was brought to Disease Investigation Laboratory, IAH &VB, Kolkata again on 26.11.2009 for post-mortem examination. The dead animal was thoroughly examined and proceed for detail laboratory investigation. During post-mortem examination, it was revealed that the carcass was pale and dehydrated. The whole abdomen was covered with slightly hard, engorged and impacted small intestine. Different vital organs inside the body revealed pale and dehydrated. Twenty two numbers of adult and immature round worms were recovered in the small intestine with inflammation and mild heamorrhagic lesions. Bacteriological culture was done from heart blood in sterile blood agar, nutrient broth and agar media did not revealed any specific bacterial growth.

Histopathological examination of different

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**Fig. 1 Pathological changes of internal organs found during desection of a dead fishing kitten.**

**Fig. 2 *Toxocara cati* in fishing a kitten recovered during Postmortem examination in laboratory.**

**Fig.3 Adult worm recovered from dissected fishing kitten.**

**Fig.4 Pathological changes detected in *T.cati* infested fishing kitten.**

organs revealed interstitial enteritis characterized by mild fibroblastic proliferation in sub-mucosa, infiltration with mononuclear cells in interglandular space in intestine . Haemorrhages and mild congestion was also evident. Lung showed fibrinous pneumonia with infiltration with neutrophil and mononuclear infiltration, but no parasitic bodies are found. Liver showed interstitial hepatitis, sinusoidal spaces filled with RBC & mononuclear cells. No parasitic migratory tracts/ parasitic bodies are found.

Examination of adult worms in Parasitology Laboratory identified as *Toxocara cati*as morphology of males are 3 - 6 cm and the females 4 - 10 cm long. The spicules are 1.63 - 2.08 mm long (Soulsby 1982).

Another fishing kitten was gradually improved by providing same treatment. A suitable diet and feeding strategy to be develop for international breeding programs of genetically valuable endangered species (Fowler and Muller 2008) like fishing cat including appropriate health coverage including deworming specially in captivity. Sprent (1956) considers the parasite to be well adopted to the Felidae in that the larger members of the family may acquire the parasite by ingestion of small rodents or ivertibrates. Though prenatal infection with *Toxocara cati,* transmammary infection is common (Swerczeh *et al.* 1971). It is possible that the majority of the infections in kittens are derived from the milk of infected queens (Soulsby 1982).

**ACKNOWLEDGEMENT:**

Authors are thankful to the Director Animal Husbandry & Veterinary Services, West Bengal for providing necessary facilities.

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