

CONCURRENT *TOXOCARA CATI* AND *ISOSPORA FELIS* INFECTION IN TWO PERSIAN CATS

Manju K. Mathew, Usha Narayana Pillai, Thomas Edison D'Sa, Anahita Anil Kumar and S Yogeshpriya

Department of Clinical Veterinary Medicine,
College of Veterinary and Animal Sciences, Mannuthy, Thrissur, 680651.

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Isospora genera of the protozoan coccidia is found to affect dogs and cats (Soulsby, 1982). Two species infect cats *I felis* and *I rivolta*. The organism is worldwide in distribution and the developmental stages occur in the small intestine. Animals become infected by ingesting sporulated oocysts. *Toxocara cati* occurs in the small intestine of cats. Paratenic hosts, rats, play an important role in the life cycle of this organism.

Case History and Observations

Two Persian cats, one six months of age and other fourteen months old (Fig.1) were presented at University Veterinary Hospital, Mannuthy in September 2011

with a complaint of anorexia since three days and foul smelling diarrhoea. Cats were transported from Bangalore one week back. Animals were fed both commercial cat food and homely food. On clinical examination intestinal loops were found to be thickened. *Toxocara cati* (Fig.2) worm was found in faeces. On microscopic examination of faeces sporulated and unsporulated *Isospora felis* (Fig.3) oocyst could be seen. Animals were treated with Banminth suspension @ 7.5mg/kg orally and advised Bactrisol bolus @ 15mg/kg per oral for five days along with supportive multivitamin therapy.



Fig.1: 6 months old kitten



Fig.2 : Toxocara cati worms from faeces

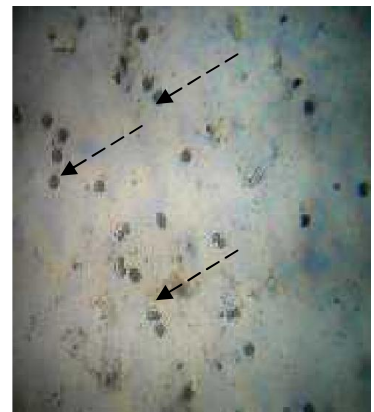


Fig.3: sporulated and unsporulated coccidial oocysts

Results

Owner reported improvement in condition of the cats after one week. Food

intake came to normal with formed faeces and faecal samples were negative for parasitic ova after two weeks.

Discussion

Isosporosis in kittens occurs primarily during weaning stress. Clinical signs in the case discussed include diarrhoea, weight loss and dehydration as described by Tomimura (1957). Coccidiosis is usually associated with other infectious agents, immunosuppression or stress. In the present case cats were subjected to transportation stress one week earlier. Diagnosis of the case is by clinical symptoms and demonstration of oocysts in the feces. Isospora oocysts consists of 2 sporocysts each with 4 sporozoites. Treatment may be unnecessary in cats since they usually spontaneously eliminate the infection. In clinically affected animals sulfa- trimethoprim could be used.

Prenatal infection does not occur with *Toxocara cati* and the infection is by ingestion of eggs containing infective

second stage larvae. Majority of infections in kittens are derived from the milk of infected queens. Clinical signs included general unthriftiness, pot bellied appearance, intermittent diarrhoea and anaemia. Diagnosis is by presence of eggs in faeces and clinical signs. Treatment can be done with benzimidazoles, pyrantel pamoate, piperazine, DEC etc.

References

- Soulsby, E.J.L., (1982). Helminths, arthropods and protozoa of domesticated animals, Elsevier Saunder, St.Louis, Missouri, USA 809p.
- Tomimura, T.(1957) . Experimental studies on coccidiosis in dogs and cats. Riseichugaku Zasshi.6: 12-14.
