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**Research Article**

# CLINICAL AND THERAPEUTIC MANAGEMENT OF ERRATIC MOVEMENT OF PARASITES IN YOUNG DOGS

**G. Kalaiselvi, N. Jayanthi, R. Ramya and C. Soundararajan**

Central University Laboratory, Center for Animal Health Studies, Tamil Nadu Veterinary and Animal Sciences University, Chennai -51

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## ABSTRACT

Parasitic infection (both ecto – endo parasites) causes greater economic losses to Live Stock and Poultry. Young puppies suffered with *Toxocara canis* infection. Totally 32 numbers of puppies at the age group of 2-5 months showed symptomatic worm infestation with bot belly appearance and few of them showed adult ascaris worms in vomit and few of the showed unilateral nasal sneezing. Presence of worms in vomitus may be associated with their erratic movements, some round worms may enter in to stomach and may be vomited and some worms may enter the bile ducts and produce obstructive jaundice and cholangitis. Prenatal and trans mammary route of infection play a major role for transmission of infection.

**Keywords:** Young puppies, *Toxocara canis*, Prenatal and Trans mammary, Zoonosis.

## INTRODUCTION

Parasitic infection (both ecto - endo parasites) causes greater economic losses to Live Stock and Poultry. Young animals commonly affected with *Ascaris* worm infection due to prenatal and trans-mammary route of transmission (Soulsby, 1982).

## MATERIALS AND METHODS

### Clinical Observation

Totally 32 affected pups clinically examined for the period of one year showed very dull and dehydrated. Conjunctival mucous membrane was pale and dry and abdomen was tucked up. The body temperature was around 40$^{o}$C and the pups exhibit continuous shivering and nervous excitement. Adult *Ascaris* worms were found in both vomited and diarrheic materials, few of the puppies showed unilateral nasal obstruction with severe sneezing, adult ascaris worms were removed with help of forceps and *Toxocara canis* eggs were found in the faecal examination of suspected cases and no significant abnormalities could be detected in peripheral blood smear.

## RESULTS AND DISCUSSION

First dehydration was corrected with inj. DNS 25 ml I/V, inj. Metronidazole 25 ml I/V followed by inj. Dexamethasone 2 mg/ kg.Bwt I/V, inj. Amoxyclav 8 mg/ kg. Bwt I/V, inj. Ranitidine 15 mg I/V, inj. chlorpheniramine maleate 10 mg I/M had given. Same treatment was continued for three days for the stabilization of patients. Puppies were dewormed with Piperazine adipeate 200 mg / kg B.Wt on the day first itself. Dogs became normal with no symptoms of diarrhoea and vomition, after a month the pups were vaccinated and the owner was advised for good hygienic management of kennel. Usually young puppies suffered with *Toxocara canis* infection because *Toxocara canis* larvae are present greatest number in colostrum so if the dam is not properly dewormed, the colostrum may be the potent source of infection to the pups. Mature worms in the intestine irritate intestinal mucosa resulting in vomition and diarrhoea (Soulsby, 1982). Presence of worms in vomitus may be associated with their erratic movements, some round worms may enter in to stomach and may be vomited, and some worms may enter the bile ducts and produce

*Corresponding Author: Dr.G.Kalaiselvi, Assistant Professor, Central University Laboratory, Center for Animal Health Studies, Tamil Nadu Veterinary and Animal Sciences University, Chennai -51 Email: kalaiselvigovindan1981@gmail.com.

obstructive jaundice and cholingitis. In *Ascaris* toxaemia, the toxic effect is due to loss of nutrient materials and the toxin substances excreted by parasites which may irritate nerves and cause nervous symptoms. Some time death may be associated with acute intestinal obstruction with adult ascarid worms (Ganti A. Sastri., 2000). Injection of Ivermectin is effective against adult and immature worms in the intestine and other visceral organs and also strains with established resistance to other anti helmintic are also susceptible. Piperazine adipeate at 200mg / kg B.Wt will remove the immature worms from puppies at the age of 1-2 weeks of age (Soulsby, 1982). The A*scaris* worm infection in dog can be controlled with good hygienic maintenance of kennel. Prenatal and trans mammary route of infection play a major role for transmission of infection to puppies so regular deworming of bitches and treating puppies with piperazine adipeate within 2 weeks of birth were recommended (Chakrabarti, 2001). Toxocariasis is the infection in humans caused by *Toxocara canis (T. canis)* and exceptionally by *Toxocara cati (T. cati)*. These worms develop the adult stage in the intestines of cats and dogs, where each female produces 200 000 eggs per day. These eggs are eliminated from the body and become infecting after 2-5 weeks. After being ingested by humans through contaminated food and water and the larvae enter through the intestinal wall, migrating via the veins into the liver and the rest of the body.

The visceral larva migrans (VLM) and ocular larva migrans (OLM) causes severe allergic reaction. OLM usually affects 7- 16 years old children. The ocular ascariasis causes strabismus, unilateral decreased vision, leukocoria, peripheral posterior pole retinal granuloma and endophthalmitis. A single eye is affected in most patients and causes diffused uveitis and chronic endophthalmitis, posterior granuloma and peripheral granuloma. Proper deworming of dog and cats will prevent the environmental contamination with toxocara eggs.

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