Endoscopic Retrieval of *Ancylostoma caninum* from Duodenum of a Dog*

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Introduction

*Ancylostoma caninum* is the most common blood sucking intestinal parasites of dog (especially in puppies) which causes severe anaemia and diarrhoea. The amount of blood loss due to a single worm in 24 hr has been estimated to be up to 0.1 mL (Lefkaditis, 2001). Taylor *et al.* (2007) reported clinical signs of *A. caninum* in dogs are loss of appetite, anaemia, poor hair coat, under weight and pica. Croese *et al.* (1994) reported that *A. caninum* in colon of human beings were detected and removed through colonoscopy.

Case History and Description

A one year old female Spitz dog brought with the history of chronic intermittent vomiting, deprived appetite since two weeks and also reported that dog had a habit of eating mud (pica). Physical examination of the animal showed dull hair coat, dehydration and pale mucus membrane. Faecal sample were collected and send to laboratory. Endoscopy examination was performed.

Discussion

Preparation and restraining of the patient was done as suggested by Zoran (2001). The dog was premeditated with atropine sulphate @ 0.04 mg/ Kg SC, Xylazine hydrochloride @ 1 mg/Kg IM. Anaesthesia was induced and maintained by Ketamine hydrochloride @ 5.5 mg/Kg IM and diazepam 0.25 mg/Kg IV (Hellyer, 1992). Endoscopic examination was performed (Tams 1999) with video endoscope, Karl Storz type no 60914 PKS. Endoscopic examination revealed a live motile worm (*Ancylostoma caninum*) in descending duodenum (Fig. 1). A live motile worm *A. caninum* was grasped and removed with the help of endoscopic grasping forceps (Fig. 2). Faecal examination also revealed *A. caninum* egg.

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Intestinal parasites are occasionally encountered during endoscopic examination of the upper small intestine (Tams, 1998). Dogs having the habit of pica may be the reason for *A. caninum* infection because infective larvae (L₃ stage) present in the soil and then they are either ingested by the animal.
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or enter through skin penetration (Taylor et al., 2007). Ruaux (2008) reported that after oral infection with Ancylostoma larvae, the parasite develop into the adult stage in the stomach and duodenum. The adults live in small intestinal lumen where they attached to the mucosa (Willard, 1998). Treatments were advised pyrantel pamoate @ 5-10 mg/kg PO, parental iron supplement and Vitamin B₁₂ (Lefkaditis, 2001).

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Reference


11th Indian Veterinary Congress at ACVM, Jaipur

The 18th Annual Conference of Indian Association for the Advancement of Veterinary Research (IAAVR) and 11th Veterinary Congress (11-12th Feb, 2011) at Apollo College of Veterinary Medicine, Jaipur – the first successful Veterinary Educational Institution in the private sector.

The inaugural session was inaugurated by Lt. Gen. (Dr.) S.K. Shrivastava, Director General, RVC in presence of distinguished Vets viz Dr. Ajay Kumar Gahlot, Vice Chancellor, RUVAS, Bikaner; Dr. A.P. Singh, Vice Chancellor, DUVASU, Mathura; Dr. M.V. Reddy, Director (AH), Andhra Pradesh; Dr. Rajesh Sharma, Director (AH), Rajasthan and more than 350 delegates from Veterinary colleges and Scientific Institutions of India and abroad from Netherland, Croatia and Nepal.

During the conference, besides the technical sessions, a round table conference on privatization of Veterinary education was organized to identifying ever shining enthusiastic opportunities, deliberating on pragmatic approaches to need based academic programs, critical gaps and threats.