Taeniasis in a German Shepherd Pup: A Case Report

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INTRODUCTION

Taenia spp. are long, segmented, parasitic tapeworms and are relatively uncommon in canine gastrointestinal diseases compared to other tapeworms like *Dipylidium caninum*. These parasites have an indirect life cycle, cycling between definitive and intermediate hosts. Dogs act as definitive hosts of different species of *Taenia* including *Taenia multiceps*, *Taenia serialis*, *Taenia crassiceps*, *Taenia hydatigena*, *Taenia pisiformis*, etc. *Taenia multiceps* is of greatest zoonotic relevance in human. In the definitive host, it causes only mild infection. Larvae are more likely to cause disease than adult tapeworms. Taeniasis in pets should be cautiously handled because of its zoonotic importance. This communication reports a case of 3 months old pup suffering from *Taenia* infection that was successfully managed with a combination of praziquantel and fenbendazole.

CASE HISTORY AND OBSERVATIONS

A German shepherd pup of 3 months age weighing 5 kg was presented with the history of vomiting and melena. There was no history of proper vaccination and deworming. The animal was anorectic for a day and became dull and dehydrated. Examination of animal showed rough body coat, rectal temperature 100.1°F, pulse rate 102/min, respiration rate 110/min (panting), slightly congested mucous membrane, capillary refilling time 2 seconds and dehydration 5%. Abdominal palpation could evince mild pain in an animal. On microscopic examination, *Taenia* ova (Fig. 1) were found in the faecal sample (++). Blood picture



Fig. 1: Microscopic view of Taenia ova (x 40)

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showed mild haemoconcentration (PCV 50%), leukocytosis (18000/µL) and neutrophilia (80%). All other parameters were normal.

TREATMENT AND DISCUSSION

Animal was treated with oral preparation containing combination of fenbendazole, praziquantel and pyrantel (Eazy pet, Intas Pharmaceuticals) at the dose of 7.5 mg/ kg body wt along with supportive therapy including DNS @ 100 mL i/v, RL @ 100 mL i/v, pantoprazole @ 0.7 mg/kg body weight i/v (P-PPi, Bluecross Laboratories Ltd), Ondansetron @ 0.2 mg/kg body weight i/v (Emeset, Cipla), Cefotaxime @ 25 mg/kg body weight i/v (Taxim, Alkem Laboratories) and B complex @ 2 mL i/v (Vitneurin, GlaxoSmithKline). After supportive treatment for 3 days, condition of animal improved. But animal showed a mild inappetence. Deworming was repeated after 14 days. By second deworming animal regained its normal appetence. Faecal examination revealed no ova of the parasite, and the animal became healthy with normal food and water intake.

Infection of *Taenia* species is commonly found in dogs in some regions most often in warm climates. Normally, infections with *Taenia* tapeworms are not harmful to definitive hosts. Severe infections in young animals may cause nonspecific signs such as unhealthy appearance and diarrhea. A number of cestodes can be expected in such dogs including *Taenia* (Cynthia, 2005). Routine

© The Author(s). 2019 Open Access This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons. org/licenses/by/4.0/), which permits unrestricted use, distribution, and non-commercial reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated. administration of praziquantel can control *Taenia* species effectively (Ettinger and Feldman, 2010). In this case, the animal was treated with a combination of fenbendazole, praziquantel and pyrantel and disease could be controlled after administration of the second dose of drugs. This observation was in accordance with Cynthia (2005). The therapeutic effect of praziquantel for *Taenia hydatigina* in dogs was also determined by Gemmell et al. (1977). *Taeniasis* in dogs can be decreased by not allowing dogs to hunt rodents or other intermediate hosts, and not feeding raw or undercooked carcasses.

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Announcement: SVSBT-2019

VII Annual Convention and National Seminar of SVSBT

The VII Annual Convention of the Society for Veterinary Science & Biotechnology (SVSBT) and **National Seminar on "Biotechnological Advances for Improving Animal Health and Productivity"** will be **organized at Navsari during 5-6 December, 2019** by the College of Veterinary Science & Animal Husbandry, Navsari Agricultural University, Navsari, Gujarat. The organizing committee of **SVSBT-2019 invites abstracts** of original and quality research work limited to 250 words by e-mail to svsbt2019@gmail.com latest **by 15th November, 2019**. Details of Seminar will be available on website nau.in. **For Further details, please contact:**

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