



PARTIAL SEIZURES IN PUPPIES DUE TO *Otodectes cyanotis* INFESTATION-A REPORT OF TWO CASES

Received : 27.06.2016

Accepted : 28.02.2017

A seizure is the clinical manifestation of an excessive discharge of hyperexcitable cerebrocortical neurons. Partial seizures have a focal onset in one of the cerebral hemisphere and limited spreading within the brain (Quesnel, 2010). Severe *Otodectes cyanotis* infestation in dogs can lead to seizures (Taylor *et al.* 2007). This paper reports two cases of seizures in puppies due to *Otodectes cyanotis* infestation.

Case 1. A 40 day old male Great Dane puppy was presented to the clinic with a history of shivering and occasional seizures especially while taking diet. The animal was under treatment with Ampicillin for the past 3 days. The pup was active and alert. The animal was walking backwards and was keeping head down. It was shaking the head. The appetite was normal. On examination, Physical parameters were in normal range. Palpation of left ear base was painful to the animal. The ear was swabbed and the brownish discharge examined under the microscope. *Otodectes cyanotis* mites and eggs were noticed.

Case 2. A female Lhasa Apso puppy aged 2 months was presented to the clinic with occasional shivering, circling and reduced appetite. The animal was shaking its head. Microscopic examination of ear swab revealed the presence of *Otodectes cyanotis*.



Plate 1. *Otodectes cyanotis* in ear wax impressions.

Both the cases were treated with Cefpodoxime @10 mg/kg body weight once daily orally for a week, Prednisolone @1mg/kg body weight BID orally for one week and Ivermectin solution 0.08% solution (HITEK@Virbac) one drop into the ear for 21 days (life cycle of the mite is for 3 weeks). The symptoms disappeared by the third day of treatment.

The development of clinical signs in otocariasis reflects the development of allergic hypersensitivity by the host to antigenic

substances produced by the mite while they are feeding. This can result in responses ranging from asymptomatic to severe otitis and convulsive seizures in different individual animals. Young animals probably acquire the mites from their mothers during suckling. Secondary bacterial infection may result in scratching and subsequent excoriation of the ear pinna and violent head shaking (Taylor *et al.*, 2007). Treatment for otitis externa due to *O.cyanotis* include any of the drugs like carbamates, pyrethrins, rotenone, ivermectin, thiabendazole or fipronyl. The 3-week cycle of the parasite should be considered for treatment planning (Radlinsky and Mason, 2010).

Summary

The paper reports two cases of seizures in puppies due to *Otodectes cyanotis*

infestation and their successful management with ivermectin and cefpodoxime.

References

- Quesnel, A.D. 2010. Seizures. In: Ettinger, S.J. and Feldman, E.C. (eds): *Textbook of Veterinary Internal Medicine* (7thEd.) Saunders Elsevier. Pp.164-170
- Radlinsky, M. G. and Mason, D.E. 2010. Diseases of ear. In: Ettinger, S.J. and Feldman, E.C. (eds): *Textbook of Veterinary Internal Medicine* (7thEd.) Saunders Elsevier. Pp.1168-1186
- Taylor, M.A., Coop, R.C. and Wall, R.L. 2007 *Veterinary Parasitology*. (3rdEd.) Blackwell Publishing. Pp. 440-442

■

Deepa Chirayath¹, K Syamala², Silpa Sasi³ and T.R. Rajin³

Department of Veterinary Clinical Medicine, Ethics & Jurisprudence, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, Kerala.

1. Assistant Professor (Corresponding Author)
Dept. of Veterinary Clinical medicine, Ethics & Jurisprudence.
 2. Assistant Professor, Dept. of Veterinary parasitology
 3. Final Year B.V.Sc& A.H. students
- Email : deepachirayath@kvasu.ac.in