

# CLINICO-THERAPEUTIC MANAGEMENT OF EPILEPTIC SEIZURES IN A LABRADOR DOG

Ritu Mahala<sup>1</sup> and S.K. Sharma<sup>2</sup>

<sup>1</sup>M.V.Sc. Student, <sup>2</sup>Professor & Head, Department of Veterinary Medicine,  
College of Veterinary & Animal Science, RAJUVAS, Navania, Udaipur (Rajasthan).

DOI 10.29005/IJCP.2023.15.2.114-115

[Received: 20.05.2023; Accepted: 06.11.2023]

**How to cite this article:** Mahala, R. and Sharma, S.K. (2023)., Clinico-therapeutic Management of Epileptic Seizures in A Labrador Dog, Ind. J. Canine Pract., 15(2): 114-115.

A female Labrador dog of age three years. was reported to VCC, College of Veterinary and Animal Science, Udaipur, with a previous history of apparent blindness, circling movement, walking aimlessly and also vigorous peddling of its limbs. It was previously vaccinated. It had the history of seizures earlier. Deworming was done regularly. Haematological examination revealed normal blood parameters. It is suspected to be a case of symptomatic epilepsy due to intra cranial lesions. It was treated with phenobarbitone, diazepam, methyl prednisolone sodium succinate and mannitol for five days. The fluid therapy was continuously administered to avoid the hypoglycemia and dehydration. Complete Remission of symptom was seen after five days of successfully treatment.

**Keywords:** Corticosteroids, Hypoglycemia, Epilepsy, Phenobarbitone, Seizure.

Seizures are one of the most common neurological disorders in dogs with prevalence of 0.5 to 5%. A seizure is defined as any sudden, short lasting and transient event and does not imply that the event is epilepsy (Berendt *et.al*, 2007). Epilepsy refers to a group of chronic neurological symptoms characterized by recurrent unprovoked seizures (Blume *et al.*, 2001). These seizures are transient due to abnormal, excessive or synchronous neuronal activity in the brain. Seizure disorders occur frequently in dogs and cats (Fisher *et al.*, 2005). In some breeds there is a strong suspicion of an underlying genetic factor as there is an accumulation of epileptic individuals within families with an incidence as high as 20% (Casal *et al.*, 2006). Moreover, the majority of the pedigree studies suggest a polygenic mode of inheritance.

## Case history and Observations

A female Labrador dog (Female) of age three years was reported to Veterinary clinical complex, Veterinary College, Navania, Udaipur, Rajasthan, with a previous history of temporary blindness, circling, walking aimlessly and also vigorous peddling of its limbs (Fig.1). Dog was previously vaccinated against canine parvo virus, canine distemper,

leptospirosis, infectious canine hepatitis, rabies and corona virus. Deworming was done regularly. It had the history of seizures earlier. Faecal examination by standard techniques revealed no parasitic ova, oocysts and gross parasites. Haematological investigation revealed normal blood parameters. Serum biochemical investigation revealed blood urea nitrogen: 31.4 mg/dl, serum creatinine: 1.1 mg/dl, ALT: 83.6 U/L, AST: 64.8 U/L, serum sodium: 154 mEq/L and serum potassium: 4.3nmEq/L. Blood glucose level was 65mg/dl. Based on the clinico-haemato-biochemical examination and negative CDV antigen rapid test, possibility of canine distemper, hepatic and renal disorder was rules out, EEG of the case could not be performed. Finally the case was treated for symptomatic epilepsy.



**Fig.1- A Female Dog (Pre Treatment)**

## Treatment

It was treated with phenobarbitone @ 2.5 mg/kg body weight intravenous route, diazepam @ 0.5 mg /kg body weight intravenous route, corticosteroid-methyl prednisolone sodium succinate @ 30 mg/ kg body weight followed 15 mg/ kg BW slow intravenous route, for five days. Intramuscular Vitamin B-complex and I.V. route fluid therapy was also given. Marked improvement was recorded in five days. The dog slept for twelve hours continuously and after those seizures was completely controlled. Then dog was kept on maintenance dose of phenobarbital syrup @ 4 mg/kg body weight, PO twice daily.

## Results and Discussion

There was uneventful recovery from



**Fig.2- The Female Dog (After Recovery)**

seizures in 20 days (Fig.2). There was uneventful recovery from seizures. Epilepsy

in present case report was characterized as seizures along with apparent blindness, circling, walking aimlessly and vigorous peddling of its limbs. Haematological parameters were within normal range. It is not possible to differentiate between idiopathic and symptomatic epilepsy based on clinical signs alone. Indications such as status epilepsy cluster or partial seizures, vocalization during seizures, and altered interictal (interval between seizures/convulsions) neurological status were more common predictors of symptomatic epilepsy.

## References

- Berendt, M., Gredal, H. and Ersboll, A.K. (2007). Premature death, risk factors, and life patterns in dogs with epilepsy. *J. Vet. Intern. Med.*, **21**:754-759.
- Blume, W., Lüders, H., Mizrahi, E., Tassinari, C., van Emde Boas, W. and Engel, J. (2001). "Glossary of descriptive terminology for ictal semiology: report of the ILAE task force on classification and terminology". *Epilepsia*, **42**(9): 1212-1218.
- Casal, M.L., Munuve, R.M., Janis, M.A., Werner, P. and Henthorn, P.S. (2006). Epilepsy in irish wolfhounds. *J. Vet. Intern. Med.*, **20**(1): 131-135.
- Fisher, R., Van Emde Boas, W., Blume, W., Elger, C., Genton, P., Lee, P. and Engel, J. (2005). "Epileptic Seizures and epilepsy: definitions proposed by the International League Against Epilepsy (ILAE) and the International Bureau for Epilepsy (IBE)". *Epilepsia*, **46**(4): 470-472.