

SUCCESSFUL MANAGEMENT OF GENERALIZED IDIOPATHIC EPILEPSY IN A DOG WITH ADD-ON GABAPENTIN

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Epilepsy is one of the most common neurological disorders encountered in small animal practice. Epilepsy refers to multiple seizures occurring over a long period of time. Although there is no universal agreement on the minimum number of seizures or period of time, a useful clinical definition is two or more seizures over a month or more (Thomas, 2010).

Case History and Observation

A male six year old Dachshund dog was referred to the University Veterinary Hospital with the complaint that the animal had seizures occurring at a frequency of about 7-14 days. The dog was under treatment for epilepsy for the past one and a half years with phenobarbital. Initially the frequency of seizure was only once in 3-4 months. Later the frequency reduced to once every 30-45 days. The dose of phenobarbital was increased by the local veterinarian to reach a dose of 6.0 mg/kg twice daily per os. However, the owner discontinued treatment for about 2 months as the animal appeared dull. However, the owner continued with the treatment later as the seizure episodes were seen frequently.

Clinical examination findings were unremarkable as the animal was active and alert, had normal mentation and did not have neurological deficits. Ultrasonography revealed a normal study and the electrocardiographic findings were normal. A complete blood count was carried out and it did not reveal any abnormalities. Serum biochemical studies revealed a total protein value of 6.8 g/dl, albumin 3.7 g/dl, globulin 3.1 g/dl, alanine aminotransferase 106 IU/l and creatinine 1.1 mg/dl. Based on the clinical, hematological and biochemical studies, a diagnosis of generalised idiopathic epilepsy was reached which was refractory to treatment with phenobarbital alone.

Treatment and Discussion

Based on the diagnosis, the dose of phenobarbital was reduced from the level of 6mg/kg over a period of three weeks. The dog was put on a treatment protocol of Tab. Gabapentin @15 mg/kg twice daily per os

and Tab. Phenobarbital 2.5 mg/kg twice daily per os. The animal was evaluated on a weekly basis. Only two seizure episodes of mild nature were reported over a 72 day period. No dosage adjustments were made. The elevation in alanine aminotransferase values could be attributed to the effects of phenobarbital (Lorenz *et al.*, 2011). Gabapentin has been tried with encouraging results as an add-on in dogs exhibiting generalized seizures and which are refractory to treatment with phenobarbital (Govendir *et al.*, 2005). It reduces the glutamate-mediated neurotransmission and may also increase the synthesis of gamma-aminobutyric acid with desirable effects (Czapinski *et al.*, 2005).

Summary

A case of generalized idiopathic epilepsy refractory to treatment with phenobarbital alone and its successful management with low dose phenobarbital and add-on gabapentin is described.

References

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