Juvenile Epilepsy in Dogs

Seizures in dogs are common, with a prevalence of 0.5% to 5.7%. There are 4 major categories: idiopathic epilepsy (IE), symptomatic epilepsy (SE), probable symptomatic epilepsy (pSE), and reactive seizures (RS). The goal of this study was to determine the underlying causes of seizures in dogs <12 months of age and determine the long-term outcome. Medical records from 3 neurology/neurosurgery units were reviewed; 136 dogs met all inclusion criteria.

The mean age of onset for seizures was 6.9 months. MRI scans were performed in 122 dogs and CT in 5 dogs. The seizures were classified as IE in 102 dogs, SE in 23, RS in 9, and pSE in 2. The outcome was determined in 114 dogs; 37% were euthanized because of seizures, and the overall mean survival time was 7 years. Dogs with seizure onset before 1 year of age and a normal neurologic examination were most commonly diagnosed with IE. There was no association between age at first seizure and survival in this population. The diagnosis of SE had a negative association with survival, whereas dogs that did not receive antiepileptic drugs before referral had a positive association with survival. Border collies diagnosed with IE and dogs with SE had a shorter survival time.

Commentary

This study is a good reminder of the importance of having a full metabolic workup, MRI, and CSF analysis on young dogs with seizures. In some breeds, such as the border collies in this study, seizures are more difficult to control. The study looked at a referral population that may have included a larger number of patients with refractory seizures and motivated owners, as compared with the general seizure population. Survival time in dogs with seizures is difficult to measure, as many dogs are euthanized for financial reasons or owner’s poor tolerance to seizures and seizure treatment.—Helena Rylander, DVM, DACVIM (Neurology)

Source