Idiopathic Epilepsy

Idiopathic Epilepsy is the term used by most experts to describe the condition of frequent seizures with no identifiable cause. Seizures occur when nerve cells in the brain become hyper exited and send rapid-fire messages to the body. If nerve cells in an isolated part of the brain are defective, only part of a dog's body is affected resulting in a partial seizure. Partial seizures are exhibited by localized body movements, such as head bobbing or imaginary fly-biting. If circuits throughout the entire brain misfire, the dog has a generalized seizure. Tonic-clonic seizures involve teeth gnashing, frantic thrashing of the limbs, excessive drooling and loss of bodily functions resulting in uncontrolled urination and defecation. Treatment of IE depends on the severity of the case and may involve daily administration of anticonvulsant drugs such as phenobarbital, primidone, potassium chloride and others. Unfortunately, all anticonvulsants have some undesired side effects. Some affect liver functions, others can make the dog drowsy or hyperactive or may cause vomiting and constipation. IE is present in all GSMD lines. It typically surfaces between the ages of 1 to 3 years but it can become evident as early as 12 months and as late as 5 years. Unfortunately, no method to identify carriers of epilepsy exists to date. It is only after a dog or a bitch has produced offspring with IE that we can assume that this particular sire or dam is probably a carrier of epilepsy. However, the mode of inheritance of IE is so complex that at the moment no one management method will assure complete control of the disease. Prudent GSMD breeders will not continue to breed a dog or a bitch that has produced 2 or more offspring with IE, and of course no serious breeder will ever consider breeding an affected animal. Many GSMD breeders and owners participate in the all breed DNA research project to locate the genetic marker for IE conducted currently at the University of Missouri/Columbia. We all hope that this research eventually will produce a reliable.

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