

Date: Mon, 01 September 2003  
From: Barbara Licht <blicht@darwin.psy.fsu.edu>  
Subject: **Overview of Epilepsy**

Idiopathic epilepsy (also called "primary epilepsy" or "genetic epilepsy") can occur in all varieties of Poodles, as well as at least 25 or 30 other breeds of dogs. However, there are many factors that can cause seizures in dogs (or people) besides idiopathic epilepsy. These include a wide variety of metabolic disorders (such as liver disorders), infectious diseases that affect the brain (such as distemper), tumors, exposure to poisons, severe head injuries, and more. Whenever a dog has seizures, it is advisable for the dog to receive a thorough diagnostic work-up. If none of the examinations or laboratory tests shows anything abnormal, then by process of \*exclusion\* the dog will be diagnosed as having idiopathic epilepsy. Although the term "idiopathic" means "of unknown cause," it generally is assumed that the dog has inherited the tendency to have seizures.

No one can make any guarantees, and there are exceptions to all rules, but when a dog has idiopathic epilepsy, the prognosis generally is very good. The majority of these dogs live long and happy lives. The prognosis for seizures due to other disorders varies depending on the particular disorder and how early it is diagnosed.

For some dogs with epilepsy, the seizures will be sufficiently infrequent (one or two per year) that no treatment is required, unless the seizures are extremely long or occur in clusters. Currently, there is no consensus concerning when treatment should begin. Most veterinarians suggest that treatment should begin if the dog is having at least one seizure per month. However, others suggest that treatment should begin much sooner (for example, if the dog is having one seizure every 3 months). Recent research shows that the long-term prognosis is better when the individual (dog or human) begins treatment before the seizures become too frequent. This is because the brain seems to "get used to" having seizures, which makes the seizures more difficult to control when you do start treatment. So you should work closely with a veterinarian that you trust in making the difficult decision of when to start treatment. Please note that I am not a veterinarian (I am a research psychologist) so I can not make any medical prescriptions. However, I am happy to discuss the pros and cons of treatment and different medications so that you can be better prepared when you discuss these issues with your veterinarian.

A number of owners and veterinarians prefer to try non-traditional ("alternative") approaches to controlling seizures. These include diets, herbal remedies, acupuncture, gold bead implants (a permanent form of acupuncture), amino acids, hormones, etc. Some owners and veterinarians report that some of these remedies help a lot, but others report that they

do not. Unfortunately, there are no controlled scientific studies on any of these to support or refute their effectiveness. Like drugs, some of these can have negative side effects. So whether you chose traditional medication or alternative treatments, careful monitoring is necessary.

For those who require medication, there are two very good drugs that are effective with dogs: Phenobarbital (PB) and Bromide. Bromide is either administered as Potassium Bromide (KBr) or Sodium Bromide (NaBr). For years, Phenobarbital has been the medication of choice, and KBr was either added or substituted when a dog does not respond well to Phenobarbital or when a dog has liver problems. (Phenobarbital is metabolized by the liver and can cause some liver problems. However, if you monitor the liver regularly, you generally will catch problems before they become serious.) Some veterinarians prefer to use KBr first because it does not cause liver problems (although some veterinarians suspect that it may increase the chances of pancreatitis). Researchers at Texas A & M are currently comparing the two drugs, but the final results have not been published yet. Regardless of which medication is used, it is important to regularly monitor the blood to determine if the level of the drug is within the "therapeutic range" (that is, high enough to control seizures, but not too high to cause serious side effects). Although there are many other drugs that are effective with humans, most of these do not work on dogs because the dog's liver metabolizes them too quickly.

There is an excellent web site on canine epilepsy that has a wide variety of articles written by both lay persons and epilepsy experts. As with every web site, you should check with a knowledgeable professional before applying any of the information to your own dog. The address is:

<http://www.canine-epilepsy.com>

In addition, a fellow Poodle fancier has compiled many of my prior "communications" about epilepsy from the Poodle Internet discussion lists. The address is:

<http://www.geocities.com/Heartland/Garden/1686>

My Best,  
Barbara