I have a friend and their dog has convulsions periodically. Is this epilepsy and is it treatable?

It very well could be epilepsy but let's explore some definitions before we talk about treatment.

Convulsion is a commonly used term but the word seizure better defines the abnormal brain activity.

In people, as well as in dogs, there are several types of seizures. Without getting too detailed, some of these common types include focal motor seizure (a focal muscle or group of muscles which twitch on a repeating basis), partial seizure (an animal which has periods of inattention or behavioral changes which repeat), or generalized (also called grand mal and these affect the entire body).

The most common type of seizure is grand mal and it manifests in the dog as loss of consciousness, falling down on their side with violent paddling movements of all four legs, and at times the dog may even urinate or defecate. These usually last from 30 seconds to 2 minutes.

Since these types of seizures can be very frightening to an owner, the length of the seizure is commonly over-estimated.

The word epilepsy truly means "repeating seizures," so a dog which has had only one seizure would not be classified as an epileptic.

Also, the word epilepsy does not denote the cause of the seizures. For example, a dog could have a brain tumor, low blood sugar (hypoglycemia), inflammation or infection of the brain (encephalitis), etc. All of these could cause repeating seizures.

Having said that, when most people use the word "epilepsy," they are referring to a patient with repeating seizures of unknown cause (idiopathic epilepsy). This means that a battery of tests has been done to rule out other diseases which might cause seizures (see examples above). The remainder of this article will address idiopathic epilepsy.

Once a diagnosis of "idiopathic epilepsy" has been made (after tests have been done), the decision to treat the patient is usually based on the frequency and severity of the seizures.

Generally, if a seizure occurs at least once every 6-8 weeks then treatment should be considered or if the seizures are very violent the treatment might be started sooner.

Also, at times the function of the patient may be important. For instance, a Labrador retriever which is used as a duck hunting retriever may be started on treatment sooner because they

spend more time in the water. This would, of course, be a terrible place for a dog to have a seizure occur.

There are many other aspects to consider regarding treatment decisions and, therefore, consultation with your veterinarian is of paramount importance.

The primary drugs used to treat epilepsy in dogs are Phenobarbital, Primidone (a drug very similar to Phenobarbital), and potassium bromide.

It is always best to start with only one drug and then add additional drugs if needed. Large breed dogs (greater than 50 pounds) are historically the most difficult to manage and many require combination therapy (more than one drug at a time).

Lastly, many of the "human" drugs such as Zonegran, Keppra, Felbatol, and Neurontin may be very effective in the dog, too. These drugs are usually reserved for add-on therapy due to their expense, but they can play an important role in the treatment of difficult to manage epileptic dogs. A good website which explains the clinical basis of epilepsy is: http://www.canine-epilepsy.net/basics/basics_main.html
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This column is provided by the faculty of the OSU Boren Veterinary Medical Teaching Hospital. The large volume of questions does not allow us to directly respond to specific email questions so please watch for your answer in the column. Email your questions for the column to dvmoncall@postoffice.cvhs.okstate.edu and watch for your answer.

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