Epilepsy
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What is a seizure and what does epilepsy mean?

A seizure is a manifestation resulting from uncontrolled electrical activity in the brain. A seizure can be caused by many conditions upsetting the brain either within the brain or outside the brain. Epilepsy is described as the tendency to have recurrent seizures. A patient having a single seizure does not have epilepsy.
What can cause a seizure?

A seizure can be caused by an imbalance in the blood or a toxin - this is called reactive seizure. It can be seen with low glucose level, liver disease or the ingestion of toxins such as a slug pallet toxicity.

A seizure can be caused by a disease affecting the brain such as an inflammation/infection, a stroke or a brain tumour. The age at onset of the seizure, the neurological examination and the results of the diagnostic tests (ranging from blood tests, genetic testing, MRI scan of the brain and possible spinal fluid analysis) are important steps to try to identify a possible underlying cause of the seizures. This will help to decide on the best possible treatment for your pet. In the absence of an underlying cause being identified, a diagnosis of idiopathic or primary epilepsy is made. In such cases a genetic cause is suspected and some breeds are more commonly affected then others (Border Collie, Italian Spinone, German Shepherd, Labrador amongst others).

How do I know if my dog or cat has idiopathic epilepsy?

It is recommend that your pet is examined by a neurology Specialist. It is also very useful to try to provide video footage of the seizure, if possible, at the time of the consultation, to be reviewed. This will help to establish that the episode is compatible with an epileptic seizure, as some other conditions can mimic a seizure. Then, depending on the age at the time of the first seizure and neurological examination findings, further investigations can be performed as discussed above (blood and urine tests, genetic testing, MRI scan of the brain and possible spinal fluid analysis). Idiopathic epilepsy remains a diagnosis of exclusion of all the other causes. It is important to rule-out underlying conditions as a satisfactory treatment can only be achieved if a correct diagnosis has been made.
Are the investigations for epilepsy invasive?

Depending on the assessment of your pet, it might be decided with you to perform investigations such as an MRI scan of the brain (which is better than a CT scan to look at the details of the brain). An MRI scan is performed under general anaesthesia following an assessment of your pet by one of our anaesthetists. The MRI scan is reviewed by our team of Specialists in diagnostic imaging. This way, the procedure is made as safe as possible and as the images are visualised by the imaging Specialist immediately, the study can be truly tailored to the need of your pet. A spinal fluid sampling may be performed by one of the neurologists following the MRI scan. Sometimes the MRI scan will highlight a problem that may contraindicate the CSF to be performed, this is why it is recommended to perform the MRI scan first. The CSF sampling is performed up to several times a day by our neurologists who are very experienced in performing this procedures to reduce the risks of complication.

Can a supplement and diet help to treat epilepsy?

It is important to use a good quality balanced diet in epileptic patients. Food supplement can be used but this is in addition to an anti-epileptic drug as supplements on their own are rarely enough to control epilepsy in dogs or cats. Recently, it has been shown that a diet supplement with MCT (Medium Chain Triglyceride) helped to reduce the frequency of seizures in dogs treated medically for epilepsy. There is to date no sufficient information to recommend the use of canabidiol oil in dogs even if there has been some anecdotal report of its use in epileptic patient.

Why should I bring my pet to Willows for investigation and management of epilepsy?

Our neurology service is led by a team of recognised, accredited Specialists and we aim to provide the best possible care and treatment for your pet in our state-of-the-art hospital. Our neurology team works closely with the imaging Specialists who run Willows sophisticated imaging facilities, as well as with expert anaesthesia Specialists and 24-hour veterinary and nursing staff. This combination of exceptional facilities and expertise allows us to provide the most accurate diagnosis and optimal care for any patient with epilepsy.

We are always happy to discuss any aspects of a case with you or your vet prior to referral.

If you have any queries or concerns, please do not hesitate to contact us.

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