



## **Paroxysmal Dyskinesia**

Just occasionally, we see a dog with intermittent episodes of unusual movement which looks like cramping or a seizure. During these episodes, the dog is fully conscious and is perfectly normal between episodes. In these cases, the dog may be suffering from an episodic movement disorder known as paroxysmal dyskinesia. These episodes are often mistaken for seizures but are a separate condition. It is likely that paroxysmal dyskinesias result from a specific area of the brain associated with movement. Whilst sometimes associated with infection, tumours or inflammation, the underlying cause is often unknown and labelled as 'idiopathic' (unknown cause). The abnormal activity in this part of the brain can cause spontaneous uncontrolled muscle activity.

Paroxysmal dyskinesias can be seen in any breed but are more likely with the Cavalier King Charles spaniel (Episodic falling syndrome), Border terrier (Canine Epileptoid Cramping Syndrome), Cairn terrier, Scottish terrier (Scottie cramp), Dalmatian and Norwich terrier, Boxer, Bichon Frise, Pugs and Labradors.

### **What does an episode look like?**

During an attack, which can last anywhere from a few minutes to a couple of hours, the dog will remain fully aware of their surroundings and neurologically normal but will have no control over the movements of their body. This can be very unsettling for both the dog and their owner. Occasionally the episodes can occur in clusters too. The episodes may be triggered by excitement or exercise in some cases.

Commonly, the hindlegs will develop 'cramping' or 'spasm' whereby they become very tense, although all limbs can be affected. The dog may attempt to walk but will struggle. Dogs may walk with a stilted gait, stand/get stuck in a bowing/prayer posture, or even fall over.

### **How is Paroxysmal Dyskinesia (PD) diagnosed?**

A detailed clinical history is important. The condition is often misdiagnosed as a partial seizure and as such, it is useful for owners to video an episode for their vet to assess the degree of consciousness and the neurological state of the dog during an attack. As a starting point, a blood test and urine assessment will likely be performed. As partial seizures and paroxysmal dyskinesias can be similar in their appearance, it is often necessary to consider an MRI scan and assessment of the cerebrospinal fluid to check for structural causes of the disease such as a tumour.

### **How is Paroxysmal Dyskinesia (PD) diagnosed?**

Paroxysmal Dyskinesias can be challenging to treat. Specific breed related versions of the condition may respond to particular treatments (eg gluten free diets for Border Terriers), but overall, most cases do not respond to medication. Due to frequent misdiagnosis as a partial seizure, many dogs will be started on an anti-seizure medication, but this does not often have any effect. The condition often starts in young dogs and has a varied prognosis. Many dogs with idiopathic disease, particularly Labradors and Jack Russell Terriers, will improve with time and age.