

## Purpose of the study



Intervertebral disc disease is unfortunately a common disease across all different types of dachshunds. In fact, a recent study showed that up to 1 in 5 dachshunds will be affected at some point in their lifetime and that it will be fatal in 25% of these (Bergknut et al., 2012). A majority of dogs who do suffer a problem related to their intervertebral discs will be referred for magnetic resonance imaging (MRI) and surgery and a vast majority do very well. Unfortunately, the cost of an MRI and surgery is often prohibitive.

We do know that some dogs who do not undergo surgery will recover. A review in 2017 showed recovery rates were similar in dogs undergoing conservative management compared to surgical management in all dogs except those who lose their deep pain perception (Freeman and Jeffery, JSAP 2017: 58, 199-204) although another review found that a greater proportion of dogs recovered with surgical management and that dogs undergoing hemilaminectomy may recover ambulation more rapidly (Langerhuus and Miles, 2017). It is, however, difficult for veterinarians to recommend conservative therapy given that data on conservative management is relatively limited. This is a significant obstacle to clinical decision making when for owners with limited financial means it may be very reasonable. It is likely some dogs are being euthanised when they could be recovered, and others undergo surgery when they could recover with medical management. This project aims to better characterise these patients by prospectively collating clinical and imaging data from dogs managed conservatively.

Who can participate?

We are looking for dogs who are less than 10kgs who suffer a disc extrusion and are unable to walk. Currently the available evidence would support surgery for these dogs, so from an ethical point of view we are only able to accept dogs into the trial from owners who are simply unable to afford MRI and spinal surgery (average cost £5-6000).

#### What does the study entail?

Cases who are enrolled will receive a consultation and neurological examination followed by an MRI under sedation. This is to confirm that the cause of the signs is a disc extrusion but also to allow data to be collected about the MRI. The charge for this will be £500 in total. After this we will help you manage your dog conservatively for 12 weeks. Twelve weeks after the first MRI, cases will return and again receive a consultation, neurological examination and MRI, this time completely free of charge (supported by a grant from BSAVA charity Petsavers).

#### How to participate

In order to participate you will have to be referred by your vet to the Queen's Veterinary School Hospital in Cambridge. For more information please contact Sam Khan at [shk47@cam.ac.uk](mailto:shk47@cam.ac.uk).

#### References

Bergknut N, Egenvall A, Hagman R et al. Incidence of intervertebral disk degeneration-related diseases and associated mortality rates in dogs. *JAVMA* 2012; 240 (11):1300-9

Freeman P, Jeffery ND. Re-opening the window on fenestration as a treatment for acute thoracolumbar intervertebral disc herniation in dogs. *J Small Anim Pract.* 2017 Apr;58(4):199-204. doi: 10.1111/jsap.12653. PMID: 28276121.

Langerhuus L, Miles J. Proportion recovery and times to ambulation for non-ambulatory dogs with thoracolumbar disc extrusions treated with hemilaminectomy or conservative treatment: A systematic review and meta-analysis of case-series studies. *Vet J.* 2017 Feb;220:7-16. doi: 10.1016/j.tvjl.2016.12.008. Epub 2016 Dec 16. PMID: 28190499.