Characterization of lumbosacral disease in Labrador retrievers

Purpose and Brief Explanation of Study:

Degenerative lumbosacral stenosis (DLSS), also known as cauda equina syndrome, is a common disease affecting the lower spine of dogs, primarily large breed dogs. DLSS frequently affects Labrador retrievers causing compression of nerves in caudal lumbar region (cauda equina), nerve roots and vessels leading to pain and neurologic deficits. DLSS is typically diagnosed using advanced imaging, such as computed tomography (CT) or magnetic resonance imaging (MRI), however the correlation between clinical and imaging findings is complex, and newer methods may lead to advances and refinement in the diagnosis of the disease. We propose to characterize DLSS in Labradors using a combination of a novel kinematic MRI technique in combination with electrodiagnostic tests. In order to fully comprehend the disease, we need to perform thorough advanced imaging and functional tests of the lumbar spine of healthy and affected Labrador retrievers. This study will be the foundation for future therapeutic and genetic studies of DLSS in dogs.

What qualifies my pet for enrollment in this in this trial?

This clinical trial will evaluate clinically affected dogs and dogs with no signs of degenerative lumbosacral stenosis.

To participate in this clinical trial your dog must have:

- Clinical signs compatible with DLSS (lower back pain, reluctance to rise, not willing to jump)
- Minimal concurrent orthopedic abnormalities
- Radiographs of the lumbar spine with no evidence of orthopedic disease or neoplasia.

Inclusion criteria for unaffected Labrador Retrievers will be the absence of clinical signs compatible with DLSS, orthopedic disease and x-rays of the lumbar spine with no apparent abnormalities.

What does enrolling my pet in this clinical trial involve?

Your dog will undergo the following procedures:

- Blood work (CBC and chemistry)
- Lumbosacral radiographs
- Electrodiagnostics
- MRI
- CT

Client Compensation

- Dogs in the "normal" group will have all costs covered by the study.
- Dogs in the "affected" group will have the cost of the MRI, electrodiagnostics, CT and anesthesia covered by the study.

Client Contact

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If you believe your pet may be eligible to enter this study, please fill out a pre-screening questionnaire.