

## ***Physical rehabilitation in dogs with cervical spondylomyelopathy - can it lead to sustained neurologic improvement and better quality of life?***

The goal of this study is to investigate two physical therapy protocols to establish if it could lead to improved neurologic function in dogs with wobbler syndrome and a better quality of life. Dogs with signs of wobbler syndrome will schedule an initial appointment with the neurology service to assess their overall health and clinical signs. If indicated, they will have general anesthesia, and an MRI of the neck performed to confirm a diagnosis of wobbler syndrome. After the diagnosis is confirmed, they will be assigned to one of two groups: A. He/she will have to come in for physical rehabilitation exercises at OSU for 5-6 months (twice a week in the first month, once a week for 2 months and every other week for the next month 2 months) and have exercises that you will do at home 5-6 times per week for 6 months OR B. He/she will have physical rehabilitation exercises you will have to do at home 5-6 times per week for 6 months. Some of the exercises include just walking your dog. We will provide you with the specific list of exercises and videos demonstrating the exercises. At follow-up appointments (30, 90 and 180 days after entering study), he/she will have a neurologic exam, walk over a gait analysis plate, and have a sensor measure limb rigidity. You will also be asked to assess the quality of life of your dog at the end of the study period (6 months).

### **Client Compensation:**

For dogs that meet the criteria as a study dog, the full cost of the MRI (if done for the project), anesthesia, and physical rehabilitation (22 sessions) will be taken care of by the study. The cost for the MRI and anesthesia will be refunded after the end of the study period. Owners are responsible for the initial diagnostics including exam fees, blood work and radiographs of the cervical spine. Any tests, procedures, or treatments beyond those specifically listed here are the owner's responsibility.

### **Potential Medical Benefits:**

Physical rehabilitation could lead to improved quality of life for dogs with cervical spondylomyelopathy (wobbler syndrome) by helping improve neurologic recovery. This could in turn lead to longer survival times.

### **Potential Medical Risks:**

No adverse effects from physical rehabilitation are anticipated. Gait evaluation using a pressure-sensitive walkway and evaluation of limb stiffness are also not expected to cause adverse effects.

As for procedures needed to confirm a diagnosis (if the dog does not already have a confirmed diagnosis via MRI), there is a risk associated with general anesthesia. Should any adverse effects be noticed during anesthesia, the procedure will be stopped.

There is also a risk of local hematoma during blood draws.

### **What qualifies my pet for enrollment?**

#### **Inclusion Criteria:**

- Show neurologic signs compatible with CSM (Wobbler syndrome)
- Have a diagnosis of Wobbler syndrome confirmed via prior MRI OR be able to undergo anesthesia for MRI to confirm diagnosis.
- Be able to walk (even if poorly)
- Have owner availability to do physical rehabilitation exercises at home (5-6 days/week for 6 months) and maybe bring dog to the OSU veterinary hospital for at-hospital rehabilitation sessions (changing frequency over 5-6 months).
- Have a disposition that allows physical rehabilitation (for example, cannot be aggressive or overly fearful)
- Be available for rechecks over a 6-month period.

**Exclusion Criteria:**

- Have other diseases that would interfere with neurologic function or weakness.
- Be unable to undergo anesthesia for MRI to confirm a diagnosis of Wobbler syndrome.
- Be unable to walk (even if poorly)
- Owner is not available to bring dog to OSU for rechecks during the 6-month study period
- Owner is unavailable or unable to do the rehabilitation exercises at home (5-6 days/week for 6 months).
- Dog is aggressive, overly fearful, or has a disposition that does not allow physical rehabilitation

**Diagnosis/Condition Being Studied:** Cervical spondylomyelopathy

**Intervention to Be Studied:** Physical rehabilitation protocols at home and in-hospital

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



**Pre-Screen  
HERE**

