Background

- Equine multinodular pulmonary fibrosis (EMPF) is a recently reported sporadic, progressive and fibrosing interstitial lung disease of adult horses. There is growing evidence that EMPF is associated with equine herpesvirus-5 (EHV-5). Histopathological results coupled with positive EHV-5 by qPCR on pulmonary tissue are considered the current gold standard for EMPF diagnosis. Valacyclovir, an anti-herpetic drug, is routinely used to treat horses with EMPF. The effect of this anti-herpetic drug has not been determined in regard to its capability to reduce viral loads of EHV-5 in blood, nasal secretions and bronchoalveolar lavage fluid. Due to the costs of the drug, it is imperative to determine if the drug has an antiviral effect against EHV-5.

Participation Requirements

- Horses diagnosed with EMPF based on lung biopsy

Procedures

- Valacyclovir treatment and daily blood and nasal secretion collections over 10 days either at the VMTH while the horse is hospitalized or at the location where the horse is stabled if the referring veterinarian and/or the owner are willing to collect the samples
- Re-examinations, blood and nasal secretion collection, and bronchoalveolar lavage a the end the 10-day valacyclovir treatment and 30 days post-treatment

Owner Responsibilities

- Covering costs of diagnostic work-up (e.g., clinical assessment, blood work, x-rays, BALF collection)
- Bringing the horse back to the VMTH for the follow-up collection

Benefits

- The study will cover the valacyclovir treatment and costs associated with the testing for EHV-5, recheck examinations with blood work and BALF analysis.
- Results of this longitudinal study will help us determine if valacyclovir has a beneficial effect on the EHV-5 viral loads in blood, nasal secretions and bronchoalveolar lavage fluid.

CONTACT INFORMATION

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