

EQUINE HERPESVIRUS TYPE 5 IN BRONCHOALVEOLAR LAVAGE FLUID OF HORSES WITH EQUINE MULTINODULAR PULMONARY FIBROSIS (EMPF) AND WITH OTHER CHRONIC RESPIRATORY DISORDERS.

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The aim of the study was to estimate the prevalence and the potential role of equine herpesvirus type 5 (EHV-5) in the bronchoalveolar lavage fluid (BALF) samples of horses with chronic respiratory signs. Altogether 60 horses with chronic respiratory signs of minimum of 2 weeks duration were involved in the study. Horses were clinically examined, respiratory endoscopy, thoracic radiography, ultrasonography, tracheal culture and evaluation of BALF cytology was performed. EHV-5 PCR assay was carried out on BALF samples of 15 horses in a commercial laboratory (IDEXX-VetMedLab Germany), 54 BALF samples were tested in the research laboratory of Szent Istvan University, Faculty of Veterinary Science and samples of 9 horses were tested by both laboratories. PCR testing by the two different laboratories gave homogenous results. Altogether there were 7 horses (prevalence: 11,6%) with positive PCR results. Three of them were diagnosed with EMPF based on histologic results of lung biopsy specimens or post-mortem tissue samples. These three horses were genetically closely related warmbloods. Two other horses suffered of suspected EMPF based on thoracic radiography with nodular interstitial pattern, EHV-5 positivity and intranuclear inclusion bodies but pulmonary biopsy was not performed on any of them. One positive horse was diagnosed with inflammatory airway disease and one with systemic granulomatous disease. Presence of EHV- 5 in BALF significantly (Fisher test, $p < 0,001$) correlated with the diagnosis of EMPF. BALF testing for EHV-5 is an important examination when establishing the diagnosis of EMPF. Genetic predisposition might render the patient more susceptible to EMPF or viral infection.