Usefulness of the assessment of discharge accumulation in the lower airways and tracheal septum thickening in the differential diagnosis of recurrent airway obstruction (RAO) and inflammatory airway disease (IAD) in the horse

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Abstract

The aim of the present study was to use endoscopic evaluation to compare the grade of accumulation of discharge in the lower airways of horses with recurrent airway obstruction (RAO) and inflammatory airway disease (IAD), and to estimate the usefulness of endoscopic evaluation in differential diagnosis of these diseases. Endoscopic evaluation consists of the amount of discharge in the lower part of the trachea and tracheal bifurcation, and the assessment of tracheal septum thickness.

This study was performed on 248 horses, 10 were healthy, 97 were diagnosed as RAO, and 141 were diagnosed as IAD. In all animals both a clinical and endoscopic examination were performed. During endoscopy, a score of mucus accumulation was estimated in 3/4 lower of the trachea and in the tracheal bifurcation. In addition to this, thickening of the tracheal septum was also assessed. According to the results of this study, it was estimated that the accumulation of mucus in the lower airways was much more advanced in RAO horses compared to horses with IAD. In horses with RAO there was a marked thickening of the tracheal septum compared to IAD horses.

The results indicate the efficacy of scoring the amount of mucus in the tracheal lumen and tracheal bifurcation, as well as the efficacy of the assessment of tracheal septum thickness in the diagnosis of these diseases.

Key words: horses, endoscopy of lower airways, RAO, IAD, mucus, tracheal septum thickening

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