

THE CHANGES OF THE CLINIC AND TRACHEA SECRETION OF THE HORSES WITH COPD

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Summary. We have investigated 19 horses with chronic obstructive pulmonary disease (COPD) and 4 clinically healthy ones. All 23 horses were clinically investigated, and the functional assay of the respiratory organs was done (following Cherepanov N. S. method); the full diagnostic endoscopic assay of trachea was done, the secretion was assessed in trachea, the samples of secretion, obtained by sterile means were assessed for colour, consistence, clarity and other criteria; they were investigated citologically and bacteriologically. We have found that of 19 horses with COPD, 9 horses (47.4%) of 10 to 23 years of age had a heavy COPD form. All horses with COPD had secretion in the trachea; the quantity, consistence and colour differed dependently on the duration and form of the disease. For 13 (68.5%) horses with COPD, the bacterium (cocci and sticks) were found during the microscopic investigation of samples, and for 1 (5.2%) horse the fungus was found. The following microorganisms were reared from the medium of secretion: *Staphylococcus arletae* – 3 (23%) horses, *Streptococcus aureus* - 1 (7.6%) horse, *Staphylococcus hyicus* - 1 (7.6%) horse, *Staph. intermedius* - 1 (7.6%) horse, *Staph. Aureus* -1 (7.6%) horse, *Pseudomonas cepacia* - 4 (30.8%), *Pseudomonasputida* - 2 (15.4%) horses and *Acidobacillus equuli* -1 (7.6%) horse. By the investigation of the sensibility for antibiotics of the bacteria grown from the samples of the secretion from the trachea, it was detected that for the antimicrobial treatment the following preparations should be used: penicilinum, streptomycinum, gentamicinum, alamicinum, lincomycinum, linkospektinum and norsulfazolum. The coherence between the age, duration, clinic of the disease and the results of the investigations of secretion of the horses with COPD was found.

Keywords: horse, COPD, clinical investigation, endoscopy, sampling.