Evaluation of race distance, track surface and season of the year on exercise-induced pulmonary haemorrhage in flat racing thoroughbreds in Brazil.

Costa MF, Thomassian A.

Department of Surgery, Júlio de Mesquita Filho College of Veterinary Medicine, São Paulo State University, Distrito Rubião Jr, s/n, Botucatu, São Paulo, 18.618-000, Brazil.

REASONS FOR PERFORMING STUDY: To our knowledge no studies evaluating risk factors to EIPH have been undertaken with such a population of horses in Brazil, which is one of the few countries in the racing community to accept the use of frusemide (FUR) as a prerace medication for bleeders. We also compared national results with those already in the literature. OBJECTIVES: To verify the influence of variables such as distance of the race, racetrack surface, going and season of the year in the recurrence and severity of EIPH and its effect on the finishing position of flat racing Thoroughbreds in Brazil. METHODS: 2118 post race respiratory endoscopies were recorded, in a total of 1003 individual horses. All horses in the study were certified bleeders (deemed positive by registered veterinarians following one or more endoscopies) and were administered FUR prior to each race. Data was analysed using both ordinary logistic regression and multiple logistic regression. RESULTS: The results suggest that race distance, season of the year and racetrack surface affect the recurrence of EIPH. Also, despite the use of FUR, the majority (62%) of horses continued to display some degree of haemorrhage. CONCLUSIONS: There was a tendency for horses that remained positive despite the use of FUR to finish unplaced in a race. Horses which had a significant reduction in bleeding and became HPIE negative after the use of FUR, tended to finish in top positions. It was not possible to determine a pattern of severity of EIPH in horses with more than one endoscopy. Further studies are required to improve our understanding of this syndrome and its correlations to performance in the racing Thoroughbred, together with the role of FUR and its possible enhancing performance effects and efficacy in consistently diminishing EIPH. POTENTIAL RELEVANCE: This study enabled a better understanding of the use of FUR in Brazilian Thoroughbred racehorses and showed there was a tendency towards improvement in performance after administration of FUR in bleeders. The fact that a large number of horses remained positive for EIPH despite the use of FUR should encourage the scientific community to search for better ways of reducing, or preventing, this syndrome.

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