



op/ed

by Gregory L. Ferraro DVM

Recently completed research regarding the use, or non-use, of Lasix in Thoroughbred racehorses adds some pertinent new facts to the discussion. One investigation looked at horses racing in Hong Kong over a 5-year period where the use of Lasix is not permitted in training or racing. A second involved a 10-year study of Australian racehorses that indicated the existence of a genetic predisposition for epistaxis (blood visible at the nose). The advantage of these studies is that they examined large numbers of horses over extended periods of time. All previous research studies have been limited to short term (one to two races) examinations of horses performing with or without Lasix. The results of both investigations should cause the US racing industry to re-evaluate its position on the use of all bleeder medications.

The Hong Kong study, conducted by S. A. Preston et al. (1), followed the racing careers of 822 horses imported for racing between 2007 and 2012. In the horses repeatedly examined by endoscopy (732), 55% were shown to be positive for Exercise Induced Pulmonary Hemorrhage (EIPH) and 45% were EIPH negative. Those horses that were EIPH positive experienced varying degrees of blood in their airways throughout their careers that did not necessarily correspond to quality of performance. Only 4% of the total number of horses ever experienced epistaxis. The pertinent results of the study showed that EIPH positive horses had a higher number of lifetime starts and a higher number of days in training, from import to retirement, than the EIPH negative group. In other words, these results indicate that the diagnosis of EIPH did not impact the length of the racing career or the total number of starts of Thoroughbred horses in Hong Kong.

In my mind, this lays aside the argument that the use of race day Lasix is necessary to protect the health and welfare of race horses. Most horses are not harmed over time by the presence of post-race or training EIPH making the need for Lasix nonexistent. Of those few horses (4%) that experience serious epistaxis, most veterinarians would agree that Lasix is certainly not going to help these horses. They would be considered to be suffering from a pathological condition and require more serious medical treatment combined with extended rest.

The second recently completed research investigation, conducted by B.D. Velie, et al.(2), involved a 10-year study of 117,088 horses corresponding to a remarkable 1,852,912 individual performance records of Australian race horses, again a study conducted in a country that does not permit the use of race day medications.

This group was interested in determining if there was a genetic predisposition for EIPH and therefore, studied the pedigrees of 715 sires and 2351 dams. As a result of this investigation the researchers were able to demonstrate that "a significant proportion of the variation in epistaxis phenotype is attributable to the additive genetic variation in the population." In other words, in the researcher's opinion, "the genetic composition of a horse clearly contributes to the likelihood of its experiencing epistaxis." Further, they went on to say "while the basis of the use of Lasix was originally on welfare grounds evidence that epistaxis is a heritable trait draws this justification into question. The use of medication that masks epistaxis may lead to the promotion of the breeding of horses carrying a genetic susceptibility to this condition." If this is true the continued permissive medication policies of American racing may harm the quality of our breeding stock and decrease the value of our horses on the international market. Consequently, the use of Lasix is not only a racing issue, but a bloodstock matter as well. While these studies do not answer all questions nor indicate a sure path to the resolution of our debate, they do provide serious evidence that the use of race day Lasix is neither necessary nor prudent.

(1) - Descriptive analysis of longitudinal endoscopy for exercise induced pulmonary hemorrhage in Thoroughbred racehorses training and racing at the Hong Kong Jockey Club. S. A. Preston, C. M. Riggs, M. D. Singleton and M. H. T. Troedsson

(2) - Heritability of epistaxis in the Australian Thoroughbred racehorse population. B. D. Velie, H. W. Raadsma, C. M. Wade, P. K. Knight, N. A. Hamilton

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