A retrospective analysis of post-sale thoroughbred yearling endoscopy as a potential predictor of future racehorse performance

K de Klerk¹, FR Bertin¹, A Sole¹, S Franklin², S Vallance³, BJ Ahern¹
¹The University of Queensland, Gatton, Queensland, Australia
²The University of Adelaide, South Australia, Australia
³Advantage Equine, 7 Vasey St, Ascot Vale, Victoria, Australia

Introduction

Upper respiratory tract (URT) endoscopy post sale using the Lane system is common at Thoroughbred sales in Australia. Laryngeal grades of 4 or above are a “fail”. Presale endoscopy is becoming more common to detect horses that are potentially at risk of future laryngeal dysfunction (“high” Lane 3). We evaluated if laryngeal grade could be related to future athletic performance.

Materials and Methods

1244 post-sale URT examinations from Australian premier yearling sales between 2008-2011 were reviewed. Data retrieved included purchase price, total earnings, number of wins and starts. Videos were graded by 3 veterinarians. The Havemeyer grades were grouped to produce the Lane 5 grade scale (Lane 3 included 2.2 and 3.1 and Lane 4 included 3.2 and 3.3). Further grouping into “normal” (Lane 1.2 / Havemeyer 1.2.1) and “intermediate” (Lane 3) or “intermediate low” (Havemeyer 2.2) and “intermediate high” (Havemeyer 3.1) and finally “abnormal / fail” (Lane 4,5 / Havemeyer 3.2,3.3,4) was performed. Multilinear logistic regressions were used to compare all performance variables against the Lane, Havemeyer and condensed grading scales.

Results

There was no difference in sale price or race starts for any laryngeal grade. Laryngeal grade and future earnings was related when using the condensed groups (both p < 0.05). “intermediate” (n = 419) earned $59,860 whereas when separated into “intermediate low” (n = 324) earned $65,145 compared to “intermediate high” earning $41,833 (n = 95).

Relevance to Australian clinical equine practice

Using the Havemeyer grading scale an additional 95 horses that would be a “pass” using the Lane scale were detected that had significantly reduced career earnings.