Effect of Insertional Suspensory Branch Desmopathy on Racing Performance in Juvenile Thoroughbred Racehorses

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Juvenile insertional suspensory branch injury causes decreased racing performance. The severity of suspensory branch injury is important when providing prognostic advice. Authors’ address: Florida Equine Veterinary Associates, 10195 N Hwy 27, Ocala, FL 34482; e-mail: infieldems@hotmail.com. *Corresponding and presenting author. © 2013 AAEP.

1. Introduction
The objective of this report was to investigate the effects of juvenile insertional suspensory branch injury (JISBI) on future racing performance, to allow clinicians to provide evidence-based prognostic advice to their clients.

2. Materials and Methods
Medical records of horses that presented with JISBI in one suspensory ligament branch were reviewed. Fifty-eight horses met the inclusion criteria. Horses were assigned a severity grade on the basis of an ordinal system. Maternal siblings were used as matched controls in a nested case-control study. Race records were evaluated for their 2- and 3-year-old racing seasons.

3. Results
The prevalence of JISBI was 9.5% for this population. Sixty-six percent of JISBI cases started a race compared with 89% of cohorts (P < 0.001). Total average earnings per start (EPS) were decreased (P < .005), as were 2-year-old (P < 0.001) and 3-year-old EPS (P < 0.01) when compared with matched controls. Mild cases performed similarly to controls by their 3-year-old season, whereas severe cases had reduced ability by all measured parameters. Although the wastage was higher in cases with JISBI, individual cases that made it to a race had EPS similar to that in their matched control. Cases with concurrent sesamoiditis had more severe grades of JISBI and decreased racing performance.