Racing Performance and Earnings in Thoroughbreds After Colic Surgery: A Retrospective Cohort Study

Joy E. Tomlinson, DVM*; Raymond C. Boston, PhD; and Thomas Brauer, DVM, Diplomate ACVS

Horses that underwent colic surgery were as likely to race and did not show a significant reduction in number of starts or earnings compared with controls. Authors’ addresses: Chino Valley Equine Hospital, 2945 English Place, Chino Hills, CA 91709 (Brauer); and the Department of Clinical Studies, New Bolton Center, University of Pennsylvania School of Veterinary Medicine, 382 West Street Road, Kennett Square, PA 19348 (Tomlinson, Boston); e-mail: joytom@vet.upenn.edu. *Corresponding and presenting author. Dr. Tomlinson began the study at Chino Valley Equine Hospital, but is currently at New Bolton Center. © 2012 AAEP.

1. Introduction
Currently there is limited information regarding postoperative performance after exploratory celiotomy in athletic horses. The null hypothesis of this study was that undergoing colic surgery with or without intestinal resection would not affect subsequent racing performance in Thoroughbred horses.

2. Materials and Methods
This retrospective cohort study included racing Thoroughbreds that survived to discharge after exploratory surgery for acute colic at Chino Valley Equine Hospital between 1996 and 2010. For each case, two matched controls were identified from the last race before surgery. Race earnings, starts, and earnings per start were compared for up to 42 months after surgery. Associations were explored using regression analysis.

3. Results and Discussion
A total of 85 cases were identified. Of these, 31 (36%) had primarily small intestinal lesions, of which 11 underwent resection; 54 (64%) had large intestinal lesions, of which 2 underwent resection. In total, 59/85 (69%) of horses that underwent colic surgery returned to racing in the subsequent 42 months versus 125/170 (73%) of controls (OR = 0.81, p = 0.49). In the 36 months after a 6-month postsurgery lay-up, cases earned a mean $7866 less (p = 0.62), had a mean of 0.26 less starts (p = 0.86), and a mean earnings per start of $29 less than controls (p = 0.98).

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