Long-Term Outcome After Laser-Assisted Modified Forssell’s in Cribbing Horses

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The laser-assisted modified Forssell’s procedure is a very effective (84.4%) surgical treatment of cribbing behavior in horses. Authors’ address: Equine Health Studies Program, Department of Veterinary Clinical Sciences, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA 70803; e-mail: djburba@vetmed.lsu.edu. *Corresponding and presenting author. © 2013 AAEP.

1. Introduction
The objectives of this study are to report on the outcome of long-term follow-up (range, 1–18 years; median = 6) after laser-assisted modified Forssell’s procedure (LARMF), to describe the prevalence of postoperative complications, and to identify risk factors associated with outcome.

2. Materials and Methods
Medical records of horses undergoing LARMF between 1994 and 2012 were reviewed. Signalment, preoperative duration of cribbing, postoperative complications, and outcomes were recorded. Logistic regression analyses were used to analyze the data.

3. Results
Follow-up was available in 90 of 119 horses; 76 horses stopped cribbing for more than a year. Of the 14 horses that resumed cribbing, the median time to cribbing relapse was 6 months. The preoperative duration of cribbing was significantly associated with an increased probability of unsuccessful outcome when horses cribbed for more than 3 years before surgery (odds ratio of positive outcome, 0.12). Postoperative complications reported in 20 of 88 included hematoma (n = 3), seroma (n = 3), infection (n = 6), and prolonged drainage (n = 6) and dehiscence (n = 2) and were also associated with a decreased probability of obtaining a successful outcome (odds ratio, 0.22). Quarter Horse and Warmblood breeds were more likely to be presented for cribbing surgery than for other conditions when compared with other breeds.

4. Conclusions
The LARMF is a very effective (84.4%) surgical treatment of cribbing behavior in horses. Preoperative duration of cribbing and the postoperative complications were identified as significant risk factors associated with unsuccessful surgical outcome, which has not been reported previously.