Effect of a Stent Bandage on the Likelihood of Incisional Infection After Exploratory Celiotomy for Colic in Horses: A Comparative, Retrospective Study

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The stent bandage significantly reduced incisional infection in horses undergoing exploratory celiotomy for colic. Authors’ addresses: Department of Large Animal Sciences (Tnibar, Grubbe Lin, Thurøe Nielsen, Christophersen, Lindegaard) and Department of Basic Sciences and Environment (Martinussen, Ekstrøm), Faculty of Health and Medical Sciences, University of Copenhagen, Højbakkegaard Allé 5, 2630 Taastrup, Denmark; e-mail: azt@sund.ku.dk. *Corresponding and presenting author. © 2012 AAEP.

1. Introduction
The objective of our study was to determine the effect of a stent bandage on the likelihood of incisional infection after ventral midline exploratory celiotomy. It was hypothesized that stent bandages would decrease the likelihood of incisional infection.

2. Materials and Methods
Medical records of horses that underwent exploratory celiotomy for colic were reviewed. Inclusion criteria were (1) one or more ventral midline celiotomies and (2) the horse had survived at least 10 days after surgery. Horses were categorized into group 1 (no stent bandage) or group 2 (stent bandage). Data relating to case details, surgery, and stent bandage were recorded. Factors associated with the outcome measure “wound infection” versus “no wound infection” were analyzed by means of the generalized linear mixed model for logistic regression.

3. Results
One hundred thirty-five horses met the inclusion criteria: 57 were assigned to group 1 and 78 to group 2. In group 1, 13 (23%) cases had incisional infection, whereas in group 2, only 3 (4%) cases had incisional infection. In the stent group, no incisional infection was observed during the last 20 months. Statistical analysis showed that only the effect of both year and stent bandage were significant ($P = 0.03$ and $P = 0.008$, respectively).

4. Discussion
Stent bandages significantly reduced incisional infection to a prevalence of 4%, which compares favorably with the literature. Stent bandages decrease incisional infection in horses undergoing exploratory celiotomy for colic.