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Effect and complications

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Publication date:
2014

Document version
Peer reviewed version

Citation for published version (APA):
Pihl, T. H., Winsborg, Y., & Olsen, S. N. (2014). *Percutaneous caecal decompression in the horse: Effect and complications*. Poster session presented at Equine Colic Research Symposium, Dublin, Ireland.

Percutaneous caecal decompression in the horse: Effect and complications

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Background & Objectives

- The effect and safety of percutaneous caecal decompression is debatable, as no comprehensive studies have been published so far.
- Objectives of the present study were to investigate effect and complications of percutaneous caecal decompression.

Conclusions

- Percutaneous caecal decompression is effective in reducing pain and improving normal rectal findings in horses with caecal tympany.
- Short-term complications such as fever were observed but were not life threatening.

Results

- One or several percutaneous caecal decompressions were performed in 147 of 1422 (10.3%) horses referred to a University hospital for colic. Two of the 147 horses were excluded from the study due to missing data.
- Complications observed are shown in table 1.
- Multiple caecal decompressions were not associated with increased risk of complications or euthanasia ($p=0.6$).
- Following caecal decompression, a significant decrease in heart-rate (fig.1), respiratory rate (fig.2), severity of colic signs (fig.3) and use of strong analgesics ($p=0.004$) were observed as were an increase in number of horses with normal rectal findings ($p<0.0001$).

Table 1. Complications observed after caecal decompression.

	Horses (number,%)
Colic horses (total)	1422
Caecal decompr.	145 (10.2%)
Complications (any)	23 (15.9%)
Type of complications:	
Fever	14 (9.7%)
Diarrhea	13 (9.0%)
Peritonitis	8 (5.5%)
Local inflammation	6 (4.1%)
Haematoma	3 (2.1%)
Abscess	1 (0.7%)
Death	0 (0%)

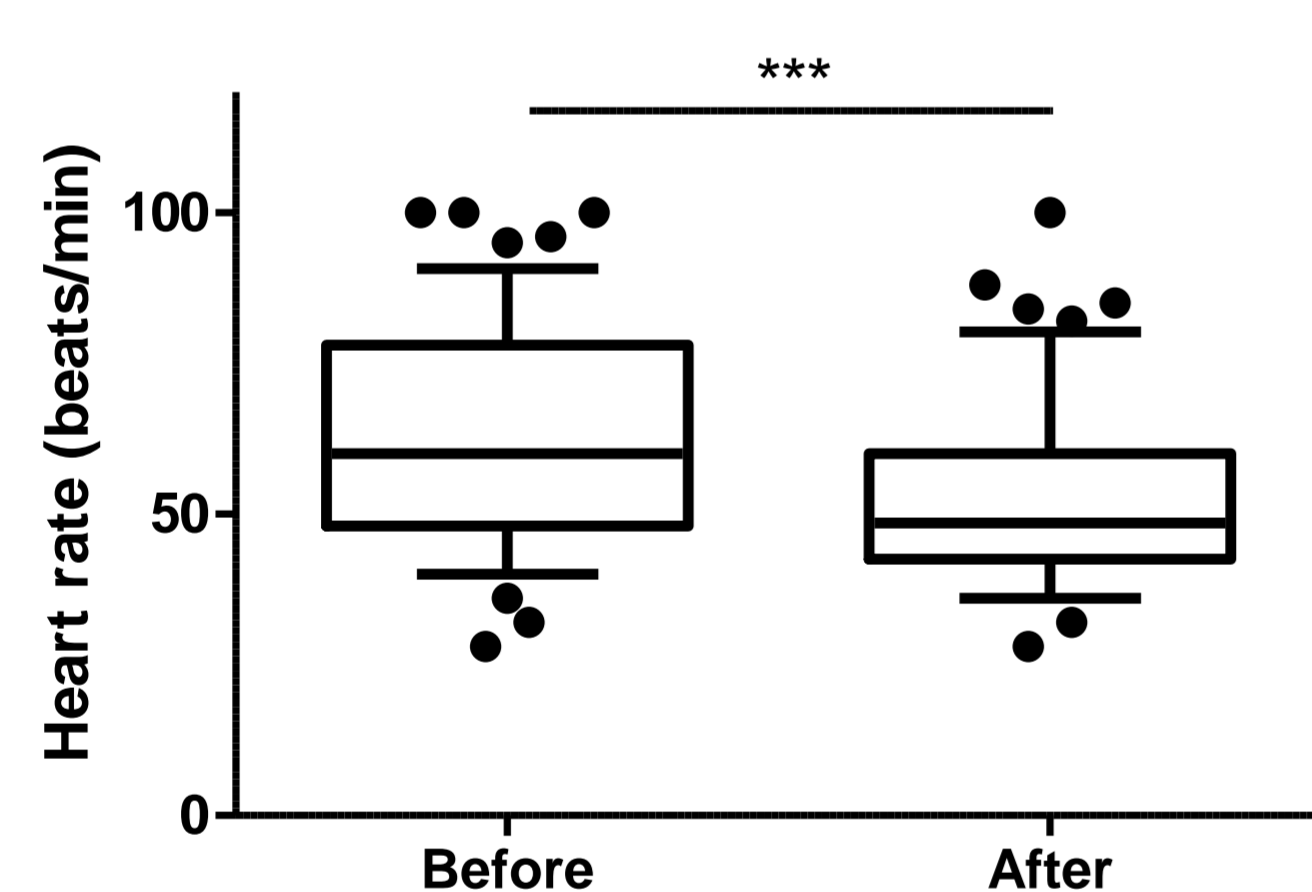


Figure 1. Heart rate before and after caecal decompression

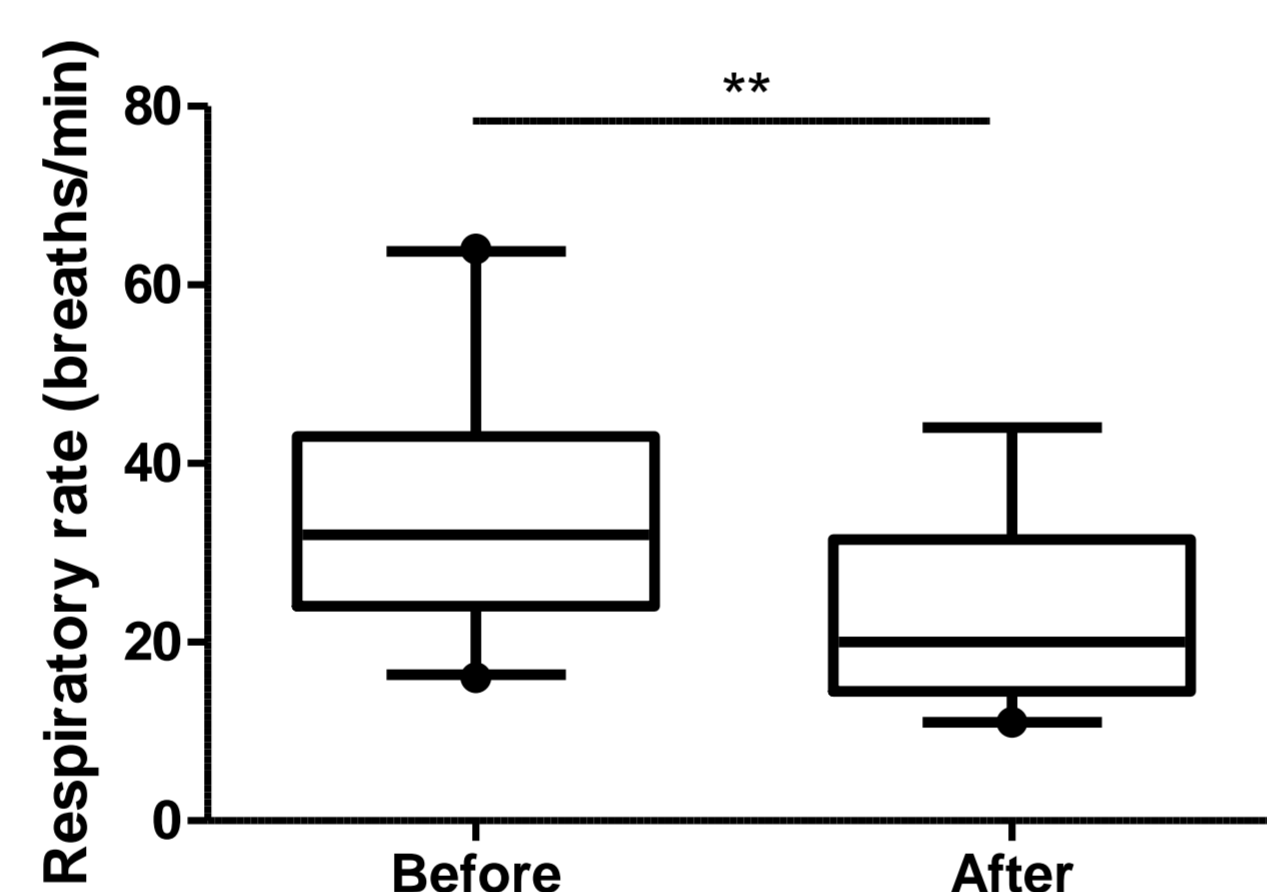


Figure 2. Respiratory rate before and after caecal decompression

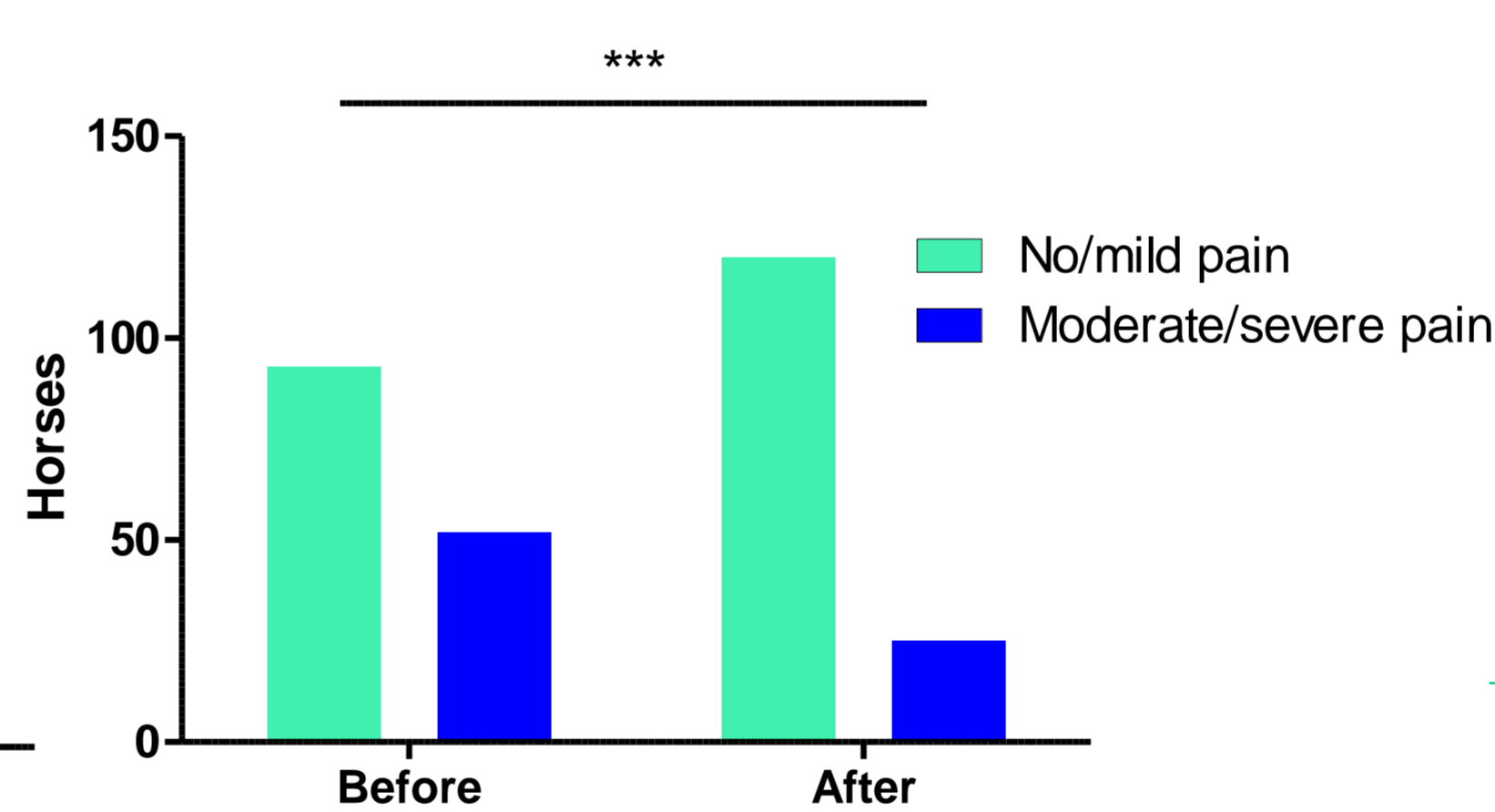


Figure 3. Signs of colic before and after caecal decompression

Methods

- Retrospective review of clinical records (January 2006 - December 2012), at the Large Animal Teaching Hospital, University of Copenhagen, Denmark.
- Clinical data before and after caecal decompression, complications and short-term survival were retrieved.
- Chi-square and paired t-tests were used to compare clinical variables before and after caecal decompression. $P<0.05$ was considered significant.

Standard procedure for percutaneous caecal decompression at the Large Animal Hospital, University of Copenhagen

- Indication:
 - Steelband sound at auscultation-percussion in the right paralumbar fossa
 - No other intestinal structures are palpated rectally between the abdominal wall and the caecum
- Method:
 - Local infiltration analgesia
 - Standard aseptic preparation
 - Skin incision 5 mm
 - Military trochar directed toward the left elbow of the horse and pushed perpendicular to the skin into the caecum
 - Stylet is removed and gas evacuated
 - Rectal examination can be repeated by an assistant for gentle pressure on caecum
 - While withdrawing the trochar 5 ml of saline or penicillin is flushed through the trochar
 - Skin is closed with staplers
 - The horse is treated with Trimetoprim-Sulfa BID for 3 days



