Percutaneous caecal decompression in the horse
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Percutaneous caecal decompression in the horse: Effect and complications

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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 aseptical 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 Trimetroprim-Sulfa BID for 3 days

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).

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.

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.

Table 1. Complications observed after caecal decompression.

<table>
<thead>
<tr>
<th>Type of complication</th>
<th>Horses (number,%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colic horses (total)</td>
<td>1422</td>
</tr>
<tr>
<td>Caecal decompr.</td>
<td>145 (10.2%)</td>
</tr>
<tr>
<td>Complications (any)</td>
<td>23 (15.9%)</td>
</tr>
<tr>
<td>Fever</td>
<td>14 (9.7%)</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>13 (9.0%)</td>
</tr>
<tr>
<td>Peritonitis</td>
<td>8 (5.5%)</td>
</tr>
<tr>
<td>Local inflammation</td>
<td>6 (4.1%)</td>
</tr>
<tr>
<td>Haematoma</td>
<td>3 (2.1%)</td>
</tr>
<tr>
<td>Abscess</td>
<td>1 (0.7%)</td>
</tr>
<tr>
<td>Death</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>