

## **Courtes communications -1**

*Pdt de séance : C. Tessier*

12h00 – 12h15

### **Retrospective analysis of 145 epiploic foramen entrapment colic surgeries in a mainly European warmblood population (2008-2016)**

*T. Van Bergen<sup>1</sup>, M. Haspeslagh<sup>1</sup>, P. Wiemer<sup>1,2</sup>, M. Swagemakers<sup>1</sup>, G. Van Loon<sup>3</sup>, A. Martens<sup>1</sup>*

<sup>1</sup>Department of Surgery and Anaesthesiology of Domestic Animals, Faculty of Veterinary Medicine, Ghent University, Belgium, <sup>2</sup>De Lingehoeve Diergeneeskunde, Lienden, The Netherlands, <sup>3</sup> Department of Internal medicine and clinical biology of large animals, Faculty of Veterinary Medicine, Ghent University, Belgium

#### **Ethical Approval**

Non-applicable

#### **Source of funding**

The study was funded by the department of Surgery and Anaesthesiology of Domestic Animals, Faculty of Veterinary Medicine, Ghent University, Belgium

#### **Conflicts of interest**

No conflicts of interest have been reported.

#### *Introduction:*

Recent data originating from a large continental European equine population regarding survival and recurrence following Epiploic Foramen Entrapment (EFE) surgery are lacking.

#### *Objectives:*

To document perioperative variables, survival to and after discharge, and variables associated with survival after EFE surgery.

#### *Methods:*

Pre-, per- and postoperative data for EFE surgeries were obtained during the 8.75 year study period. Post-discharge information was gathered by telephone. Associations of different variables with re-laparotomy, hospital discharge and colic after discharge were assessed by logistic regression, as was the effect of anastomosis type on occurrence of post-operative ileus (POI). A survival analysis of discharged horses was performed.

#### *Results:*

The study population consisted of 142 horses, on which 145 surgeries were performed (3% recurrence). Warmblood horses represented 85% of the population and windsucking/crib-biting was confirmed in 60% of cases. EFE occurred from left to right in all cases and in 74% of entrapments, the ileum was involved. After intestinal reduction, decompression without resection was performed in 57 (53%) surgeries and a resection in the remaining 51 surgeries (47%). After resection, end-to-end jejunoileostomy was performed in 24 cases (47%), end-to-end jejunojejunoostomy in 21 cases (41%) and side-to-side

jejunocecostomy in 6 cases (12%). Thirty-seven horses (26%) were euthanized during surgery. For 8 horses (6%), this was due to uncontrollable intraoperative hemorrhage, in 17 (12%) because of technical restrictions and in 12 (8%) due to financial or prognostic constraints. One horse was euthanized during recovery because of femoral nerve paralysis, resulting in 107 (74%) recovered horses. Survival to discharge of all horses that underwent surgery was 48%. Survival to discharge of all recovered horses was 65%, which results in a mortality rate of 35% during the postoperative hospitalization period. Death or euthanasia was due to POI in 26 (70%), endotoxaemia in 4 (11%), peritonitis in 3 (8%), laminitis in 2 (5%), pelvic trauma in 1 (3%) and eventration after re-laparotomy for EFE recurrence in 1 case (3%). Median survival of discharged horses was 1529 days. Increased preoperative heartrate had a negative effect on survival to discharge and an increased preoperative peritoneal fluid lactate concentration on survival after discharge. The occurrence of POI influenced survival to discharge negatively and jejunoileostomy was significantly associated with POI.

#### *Discussion:*

High morbidity and mortality were associated with EFE surgery. Both preoperative heartrate and peritoneal fluid lactate concentration significantly influenced outcome. Occurrence of POI had a negative effect on hospital discharge. After surgery, EFE recurred in 3% of cases, despite the reported spontaneous obliteration of the epiploic foramen in about 50% of surgical cases. Closure of the epiploic foramen can prevent recurrences and this could especially be of interest for horses at increased risk (crib-biting/windsucking).