CLINICAL PATHOLOGY AS A PREDICTOR FOR COLONIC MUCOSAL PATHOLOGY

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Background: Colonic mucosal pathology can currently only be reliably detected by post-mortem examination.

Objective: The aim of this study was to determine if there was an association between the presence of colonic mucosal lesions and 36 clinical pathology parameters including haematology, biochemistry, tapeworm ELISA, faecal worm egg count and faecal haemoglobin and albumin.

Methods: The population consisted of 42 horses of a variety of signalments that presented for elective euthanasia and underwent a full post-mortem examination.

Results: Colonic mucosal pathology was detected in 40 horses, and this was of a severity or aetiology deemed to be of potential clinical significance in 28 (ClinSig). Histological examination of colonic sections confirmed an inflammatory response. Univariate logistic regression was performed with the outcome variable of ClinSig. A multivariable model was then produced in order to predict this outcome; the final model showed that potentially clinically significant colonic pathology is associated with low serum albumin (P = 0.02, OR 0.73) and the presence of faecal haemoglobin (P = 0.02 OR=6.88). The area under a receiver operating characteristic (ROC) curve was 0.83 representing good ability for the two combined clinicopathological factors to predict colonic mucosal pathology of potential clinical significance. Chi2 tests were also performed to determine if there was an association between ClinSig and the presence of faecal haemoglobin (P = 0.01) and low serum albumin (assessed as a binary outcome unlike logistic regression) (P = 0.07).

Conclusions: In summary, the combined presence of these two factors has good predictive ability for the presence of colonic pathology of potential clinical significance.

Ethical approval: Obtained from the University of Glasgow Welfare and Ethics Committee. Owner consent obtained.

Conflicts of interest: None. Sources of funding: Freedom Health LLC.

RESULTS OF COLOPEXY THROUGH LEFT VENTRAL PARAMEDIAN INCISION FOR LARGE COLON DISORDERS IN THOROUGHBRED BROODMARES: CLINICAL OUTCOME IN 156 CASES FROM 1999–2015

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Objective: To describe the technique of performing a colopexy through a left ventral paramedian incision and report clinical outcome.

Methods: Retrospective case series. Medical records and progeny records were reviewed for frequency and type of post-operative complications, survival to discharge, and reproductive performance in 156 Thoroughbred broodmares that had a colopexy through a left ventral paramedian incision between 1999 and 2015. Survival 1 year post-operatively was obtained from the medical record, progeny record, or telephone conversation with the client.

Results: The recurrence rate of large colon volvulus after colopexy was 1.2%. The rate of colon rupture post colopexy was 3%. Short-term survival rate (to discharge) was 93% and long-term survival (to 1 year post-op) was 81%. Mares pregnant at the time of colopexy, who survived to discharge, produced a live foal at a rate of 66%. Post colopexy the live foal rate/season bred was 67%.

Conclusions: In this population of horses, colopexy through a left paramedian approach resulted in recurrence of large colon displacement or volvulus in only 1.2% of horses. Mares undergoing colopexy using this technique have a good prognosis for survival and continued use as a broodmare.

Ethical animal research: None. Source of funding: None. Competing interests: None.

LEFT VENTRAL COLOPEXY: AN ALTERNATIVE TECHNIQUE TO AVOID A SECOND ABDOMINAL INCISION

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Background: Left ventral colopexy (LVC) has been described as a way to prevent future celiotomy or potential catastrophic loss of the animal due to recurrence of large colon volvulus (LCV) or displacement.

Objective: We report surgical technique and outcome for horses receiving a LVC without a second cutaneous incision in horses.

Methods: The left ventral colon midway between the sternal and pelvic flexures was sutured to the left ventral abdominal wall after correction of the presenting issue. The needle was visualized passing subcutaneously, thus ensuring engagement of the skin. Surgical findings, survival to discharge, long-term survival (1 year), and return to use were recorded.

Results: LVC was performed in 19 animals, 15 (79%) presented with LCV. 2 (10.5%) with left displacement of the large colon, and 2 (10.5%) with right displacement. One horse with LCV was euthanized in hospital. The remainder of the horses survived to discharge. 5 (26%) horses were lost to long-term follow-up, 4 (21%) had multiple colic episodes in the year after surgery, for which 3 (16%) were euthanized and 1 (5%) was medically managed, and a good outcome with no complications was reported for 9/14 (64%) in the first year after surgery. 5/6 (83%) broodmares had foals after surgery, and 2/2 dressage horses had a return to full athletic use.

Conclusions: LVC can be successfully performed with similar outcomes without a second abdominal incision. Colopexy may be safe in animals destined for athletic use.

Ethical approval: Not required. Owner consent obtained. Source of funding: None. Competing interests: None.