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A SURVEY OF NON-STEROIDAL ANTI-INFLAMMATORY DRUG USE IN THE POST-OPERATIVE PERIOD FOLLOWING EQUINE COLIC SURGERY

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Background: There is currently a lack of evidence surrounding the factors that contribute towards a clinician's decision to discontinue non-steroidal anti-inflammatory (NSAID) administration during the post-operative period following equine colic surgery, as well as the drugs and dosages commonly administered to these patients.

Objective: Survey diplomates of American and European colleges as to their use of NSAIDs in the post-operative period following exploratory celiotomy for colic signs.

Methods: Information about NSAID usage in the post-operative colic patient was collected via an online questionnaire distributed to boarded equine veterinarians from the American College of Veterinary Internal Medicine (ACVIM), the European College of Equine Internal Medicine (ECEIM), and the European College of Veterinary Surgeons (ECVS).

Results: Responses were obtained from 60 clinicians. Flunixin and phenylbutazone were the most administered NSAIDs, and were also the most widely available drugs. 83% of clinicians ranked absence of active colic signs as an important factor to consider when deciding the timepoint for NSAID discontinuation following colic surgery, in addition to 81% for pain score evaluation, and 78% for absence of fever. NSAIDs were typically discontinued 5 to 7 days post-operatively in the absence of complications, but were often continued for longer where complications occurred.

Conclusions: There is variation in NSAID usage in the post-operative colic patient, but agreement among clinicians about which factors are influential when considering NSAID discontinuation.

Ethical animal research: Data collection by questionnaire was approved by the University of Nottingham School of Veterinary Medicine and Science research ethics panel.

Source of funding: None.

Competing interests: None.

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COMPARISON OF LIBERAL AND GOAL-DIRECTED FLUID THERAPY IN HORSES AFTER SMALL INTESTINAL SURGERY: A PILOT STUDY

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Background: Fluids administration in the perioperative period is paramount in colic surgery. Nevertheless, there is an ongoing debate since it is challenging to reach the right balance and avoid complications induced by over-hydration.

Objectives: To evaluate the effect of Goal-directed fluid therapy (GDFT) of "liberal" fluid regimens in horses undergoing small intestinal surgery.

Methods: 18 horses submitted to small intestinal surgery that recovered from anaesthesia were enrolled and matched according to the surgical lesion, type of anastomosis, length of resection, and duration of symptoms. Horses in the 'liberal' group were administered IV fluids for at least 24 h at a minimum rate of 2 mL/kg/h plus integration for fluid losses. In the 'GDFT' group, IV fluids were administered only when considered necessary based on clinical and haematological parameters. Other treatments were limited to flunixin meglumine, ranitidine, calcium and antibiotics. Post-operative reflux (POR), packed cell volume, total protein, heart rate, venous lactate concentration and complication rate were compared, as well as short-term survival rates.

Results: Three horses in the 'liberal' and 1 horse in the 'GDFT' group developed POR. All tested parameters were not fine indicators for hydration status although they resulted not different between groups. Post-operative complication rate and survival were not different between groups (2/13 horses died before discharge in each group).

Conclusions: Further studies are necessary to set guidelines for evaluation of the hydration status and to plan post-operative fluid administration in a clinical setting, but GDFT may be considered as an approach for fluid therapy after colic surgery.

Ethical animal research: No ethical approval required.

Source of funding: None.

Competing interests: None.

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EFFECTS OF PHYSOSTIGMINE ON QUALITY OF RECOVERY AND POST-OPERATIVE GASTROINTESTINAL DYSFUNCTION FOLLOWING INHALANT ANESTHESIA IN HORSES

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Background: The number of adverse events from undergoing general anaesthesia is significantly higher in horses than humans or companion animals, with death rates up to 1.8%. One-third of those deaths are associated with the anaesthetic recovery period, many through catastrophic injuries associated with poor quality of recovery. Current thinking assigns this post-anaesthetic disorientation to residual low circulating levels of inhalant anaesthetics that produce anticholinergic effects. Based on previous studies, it was hypothesised that physostigmine, an acetylcholinesterase inhibiting drug, would combat this disorientation and increase both recovery quality and gastrointestinal motility during the post-operative recovery period.

Objective: To demonstrate the effect of physostigmine on quality of post-operative recovery and gastrointestinal motility in horses undergoing elective arthroscopy and emergency celiotomy.

Methods: A randomised, double-blind, clinical trial was conducted on 32 horses undergoing elective arthroscopy and 9 horses undergoing emergency ventral midline celiotomy for treatment of colic using both objective and