

22 ABSTRACTS

surgery. There was a significant association between post-anaesthetic respiratory complication and colic versus non-colic surgery ( $\chi^2 = 11.25$ , p < 0.001). Pneumonia was the most common respiratory morbidity, affecting 10 of 40 horses (25%) with four detected within 48 h and six detected on days 3-7 post-anaesthesia. Eight cases resolved completely with varying treatment. Upper respiratory tract (URT) obstruction (9/40 horses, 22.5%), nasal discharge (6/40 horses, 15.0%), aspiration/ regurgitation (6/40 horses, 15.0%), persistent cough without progression to pneumonia (6/40 horses, 15.0%) and respiratory arrest (3/40 horses, 7.5%) were also reported. Overall, 21/40 (40.5%) of respiratory morbidities were detected in recovery and 31/40 (77.5%) resolved with no/minimal intervention, 5/40 (12.5%) resolved with substantial intervention and cost, 1/40 (2.5%) incompletely resolved with no predicted impact on quality of life (QoL) and 3/40 (7.5%) incompletely resolved with a predicted impact on QoL.

**Main limitations:** A small number of database inconsistencies required clarification.

Conclusions: Pneumonia and URT obstruction were the two most common post-anaesthetic respiratory morbidities reported. Horses were more likely to develop a respiratory morbidity after colic surgery versus non-colic surgery. The majority of respiratory morbidities resolved completely.

**Ethical animal research:** Approved by the Association of Veterinary Anaesthetists Ethical Review Committee Certificate 2022-001.

**Informed consent:** The anonymity and confidentiality of the patients, owners and centres was ensured.

Competing interests: None.

**Funding:** Kate Borer-Weir Memorial Fund of the Association of Veterinary Anaesthetists and The Horse Trust.

## 35 | Post-anaesthetic surgical site complications in horses: Preliminary results from a CEPEF-4 satellite study

K.R. Loomes<sup>1</sup>, J. de Grauw<sup>2</sup>, M. Gozalo-Marcilla<sup>3</sup>, J.I. Redondo<sup>4</sup> and R. Bettschart-Wolfensberger<sup>5</sup>

<sup>1</sup>Rainbow Equine Hospital, Malton, North Yorkshire, YO17 6SG, UK; <sup>2</sup>Department of Clinical Sciences and Services, Royal Veterinary College, London. UK; <sup>3</sup>The Royal (Dick) School of Veterinary Studies and The Roslin Institute, Easter Bush Campus, The University of Edinburgh. Edinburgh, UK; <sup>4</sup>Departamento de Medicina y Cirugía Animal, Facultad de Veterinaria, Universidad Cardenal Herrera-CEU, CEU Universities, Valencia, Spain; and <sup>5</sup>Department of Clinical Diagnostics and Services, Vetsuisse Faculty, University of Zürich, Switzerland.

Email: kate@rainbowequinehospital.co.uk

**Background:** Surgical site complications are an important cause of post-anaesthetic morbidity in horses and large-scale multi-centre prospective studies are currently limited.

**Objective:** To investigate the prevalence and type of surgical site complications occurring within 7 days post-anaesthesia.

Study design: Prospective observational multi-centre.

**Methods:** Nine equine hospitals used an online questionnaire to report every surgical site complication (discharge, excessive swelling/heat/pain, wound dehiscence) detected within 7 days post-anaesthesia. Data were analysed alongside CEPEF-4 data using descriptive and chi-squared analysis.

Results: Post-anaesthetic surgical site complications occurred in 64 of 2161 horses (3.0%) of which 26 of 316 horses (8.2%) were post-colic surgery. The association between surgical site complication and colic surgery versus non-colic surgery was significant ( $\chi^2 = 30.34$ , p < 0.001). Surgical site discharge affected 33/64 horses (51.6%) of which 14 had concurrent excessive swelling/heat/pain and 6 had concurrent wound dehiscence. 10/33 (30.3%) were detected within 48 h, 12/33 (36.4%) on days 2-3 and 11/33 (33.3%) on days 4-7 post-anaesthesia. Surgical site discharge resolved completely with no/minimal intervention in 14/33 horses (42.4%), while 2/33 (6.1%) resolved with substantial intervention, 9/33 (27.3%) incompletely resolved and 8/33 (24.2%) were lost to follow-up. Surgical site excessive swelling/heat/pain affected 27/64 horses (42.2%) of which, 10/27 (37%) were detected within 48 h. 12/27 (44%) on days 2-3 and 5/27 (18.5%) on days 4-7 postanaesthesia. Excessive swelling/heat/pain resolved completely with no/minimal intervention in 13/27 horses (48.1%), 3/27 (11.1%) incompletely resolved and 11/27 (40.7%) were lost to follow-up. Surgical site dehiscence alone was reported in 4 horses. Co-morbidities (most commonly, post-anaesthetic colic, catheter-associated phlebitis and pyrexia) were present in 52% of horses with surgical site complications.

Main limitations: Loss of cases to follow-up.

**Conclusions:** Surgical site complications were more likely in horses after colic versus non-colic surgery. Co-morbidities were present in more than half of horses with surgical site complications.

**Ethical animal research:** Approved by the Association of Veterinary Anaesthetists Ethical Review Committee Certificate 2022-001.

**Informed consent:** The anonymity and confidentiality of the patients, owners and centres were ensured.

Competing interests: None declared.

**Funding:** Kate Borer-Weir Memorial Fund of the Association of Veterinary Anaesthetists and The Horse Trust.

## 36 | Increased risk of fatal laminitis during hospitalisation amongst phallectomy patients compared to laparotomy patients in a UK equine hospital over 10 years

R. Tucker<sup>1</sup>, V. South<sup>1</sup>, N. Robinson<sup>2</sup>, G. Cunningham<sup>3</sup>, H. Hemmings<sup>1</sup> and J. Stavisky<sup>2</sup>

<sup>1</sup>Liphook Equine Hospital, Liphook, Hampshire, UK; <sup>2</sup>Vet Partners Ltd, Spitfire House, Aviator Court, York, UK; and <sup>3</sup>Southern Rangitikei Veterinary Services, 233 State Highway 1, Bulls, New Zealand. Email: rachel.tucker@theleh.co.uk

**Background:** En-bloc phallectomy and urethrostomy under general anaesthesia (GA) is used to treat extensive neoplasia of the penis and prepuce. Observation of patient outcomes post-phallectomy suggests alarming rates of peracute, severe, and fatal laminitis.