# Equine Veterinary Education

#### Abstracts

occlusion caused by the port itself. At this stage, peristalsis, that cannot push the luminal content aborally, will instead pull the intestinal segment orally. This can eventually lead to the exit of the proximal intestine until the luminal content in the herniated portion will block this progression. Distally, being the intestine empty, it is easily and progressively brought into the hernia. This progression ends only when the ileum is involved and traction on the ileocaecal valve prevents this phenomenon.

**Conclusions:** This hypothesis can explain why the ileum is involved in the majority of cases of internal hernias. Eventually, antiperistaltic drugs administered early in the course of the disease, may reduce the length of intestine affected.

Ethical animal research: No ethical approval required. Source of funding: None. Competing interests: None.

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## STANDARDISATION OF CRITICAL DECISIONS AND COSTS TO REDUCE EUTHANASIA IN COLIC SURGERY. A SINGLE-CENTRE PROSPECTIVE STUDY IN ITALY

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**Background**: Pre- or intra-operative euthanasia is often chosen for financial constraints or presumed poor prognosis. This can reduce the total number of horses potentially saved with colic surgery, despite the actual condition of the horse.

**Objectives:** To reduce pre- and intra-operative euthanasia of colic cases due to financial constraints and presumptive 'poor prognosis'.

**Methods:** For cases admitted for colic surgery, a standard protocol for critical decisions was used. To eliminate the financial factors, owners were offered a standard range of price for colic surgery, regardless of the eventual need for resection and anastomosis.

**Results:** Price quotation for colic surgery was 4800-5800 euros and was well accepted by owners and sustainable by the hospital. Two-hundred and eleven cases were admitted (66 medical, 145 surgical). Consent to surgery was given in 132/ 145 horses. Euthanasia for decision of the surgeon were 2/132 before surgery (viscera rupture), and 8/130 intraoperatively (5 because of viscera rupture, 2 for excessive length of necrotic small intestine, 1 for unresectable large colon). Two horses died during anaesthesia and 4 were euthanised in the recovery stall. This led to 115 horses that stood after anaesthesia. Twelve horses were euthanised because of postoperative complications. Seventy-nine percent of operated and 89.5% of recovered horses were discharged from the hospital.

**Conclusions:** Standardisation of procedures and costs resulted sustainable, while reducing biases due to the surgeon choice or owner decision, and with survival rates comparable to other studies. One of the main causes of death was the owner not giving consent to surgery.

Ethical animal research: No ethical approval required. Source of funding: None.

Competing interests: None.



## CLINICAL COMPARISON BETWEEN A SKIN-STAPLED AND A CONTINUOUS LEMBERT PATTERN FOR JEJUNOJEJUNAL END-TO-END ANASTOMOSIS IN HORSES

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**Background:** One-layer jejunojejunal anastomosis is considered effective in horses. Several patterns have been proposed but rarely compared clinically.

**Objectives:** The objective of the study was to compare outcome and complications of a modified skin stapled and a continuous Lembert pattern in jejunojejunal anastomosis in horses

**Methods:** Data from clinical records of 24 horses that underwent jejunojejunostomy between January 2018 and January 2021 at the University of Turin VTH were retrieved. Short-term complications, short- and long-term survival (>9 months) were compared after a modified skin stapled (12 horses with strangulating lesions, 1 with non-strangulating lesion), and a continuous Lembert pattern (10 horses with strangulating lesions, 1 with non-strangulating lesion).

**Results:** Post-operative reflux (POR) developed in 9 horses, 6 with the continuous Lembert and 3 with the skin stapled anastomosis. POR in the continuous Lembert group was caused by obstructive adhesions found at necropsy (2 cases), obstruction of the anastomotic site confirmed at relaparotomy (1 case). In the skin stapled group, one of the horses that developed POR was found having obstructive adhesions at necropsy but not involving the anastomosis. Short-term survival was 85% (11/13) for skin stapled anastomosis, and 72% (8/11) for the continuous Lembert pattern. Long-term survival (>9 months) was 100% for skin stapled anastomosis, and 90.9% for continuous Lembert pattern.

**Conclusions:** Both patterns performed well in clinical use, although the Lembert continuous pattern has a higher risk of developing POR.

Ethical animal research: No ethical approval required. Source of funding: None.

Competing interests: None.

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## EX VIVO COMPARISON OF LIGATURES AND HAEMOSTATIC CLIPS FOR MESENTERIC VESSELS OCCLUSION IN SMALL INTESTINAL RESECTION AND ANASTOMOSIS

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**Background:** In equine abdominal surgery extensive resection and anastomosis of small intestine is a commonly performed procedure. To provide haemostasis, absorbable ligatures, surgical staplers and vessel sealing devices have been proposed in horses.

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