

SACROCOCYGEAL EPIDURAL ANAESTHESIA IN TWO CATS FOR RESECTION OF BLADDER TUMOUR

INTRODUCTION

We describe two cases of anaesthesia in two cats for bladder tumour resection using the abdominal ultrasound guided laser diode technique.

Both cystoscopy¹ and cystotomy are painful procedures.

The main objective of the anaesthetic protocol is to produce the necessary analgesia to avoid nociception and the resulting hemodynamic repercussions.



DESCRIPTION

In both cases, tumour excision is performed using the endoscopy diode laser technique guided by ultrasound to ensure the integrity of the bladder wall. The two are classified as ASA III according to the classification of the American Society of Anesthesiologists.

	Case 1: Female	Case 2: Male
Patient	British, 7 years old, 4 kg Azotaemia and atrophy or degeneration of the right kidney Docile character	European, 13 years old, 3.7 kg Mild anaemia and azotaemia Aggressive character
Surgical technique	Cystoscopy	Percutaneous cystotomy
Anaesthetic protocol	Fluid therapy for 24 hours prior to surgery Premedication: methadone (0.1 mg/kg) and alfaxalone (1 mg/kg) IV Induction: alfaxalone (0.6 mg/kg) and midazolam (0.1 mg/kg) IV Maintenance: isoflurane (Falso 1.4-0.42%), midazolam Sacrococcygeal epidural with 2% lidocaine (1 ml), neurostimulation guided technique	Premedication: methadone (0.2 mg/kg), dexmedetomidine (2 µg/kg), midazolam (0.1 mg/kg) and alfaxalone (1 mg/kg) IM Induction: alfaxalone (1 mg/kg) and midazolam (0.1 mg/kg) IV Maintenance: isoflurane (Falso 0.99-0.42%) Sacrococcygeal epidural with 2% lidocaine (0.7 ml), neurostimulation guided technique
Monitoring	Capnography, ECG, SpO ₂ and temperature remained stable Fluid therapy with Lactated Ringer at 3 ml/kg/h The anaesthesia time was 1 h 50 min	Capnography, ECG, SpO ₂ remained stable Fluid therapy with Lactated Ringer at 3 ml/kg/h The anaesthesia time was 2 h 05 min
Complications	Mild hypotension: PAS 79 mmHg, PAM 51 mmHg. Resolution decreasing % Iso, increasing 5 ml/kg/h fluid therapy and dopamine CRI.	Mild hypotension: PAS 69 mmHg, MAP 47 mmHg. Resolution decreasing % Iso, increasing 5 ml/kg/h fluid therapy and dopamine CRI. Hypothermia: The temperature dropped to 33.7 °C It remained with electric blanket for small animals and the serum that was introduced in the bladder for laser resection was heated



CONCLUSIONS

Both animals already had azotaemia. Falso was reduced to 0.42%, maintaining the anaesthetic plane with midazolam, but still the two cases presented mild hypotension. We chose to treat hypotension with dopamine to avoid further kidney injury.

Blood pressure was measured with an HDO oscillometric method that overestimates low blood pressure values and underestimates high and medium diastolic blood pressure values in anesthetized cats².

The main objectives of the anaesthetic-analgesic protocol that were to produce analgesia for the surgical procedure and to use low% Falso were met.

The analgesia was adequate since it was not necessary to administer intraoperative analgesics. In both cases they had good recovery.

To know more about the cases, click [here](#)

REFERENCES

1. Clarke K W, Trim C M, Hall L W. Veterinary anesthesia. Saunders Elsevier, 11th edition, págs. 466-468. 2014.
2. Mark J. Acierno, Diana Seaton, Mark A. Mitchell, Anderson da Cunha, Agreement between directly measured blood pressure and pressures obtained with three veterinary-specific oscillometric units in cats. Journal of the American Veterinary Medical Association, August 15, 2010, Vol. 237, No. 4, Pages 402-406



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