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Electroanalgesia for the postoperative control pain in dogs.

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Source

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Abstract

PURPOSE:

To evaluate the analgesic and neuroendocrine effects of electroanalgesia in dogs undergoing ovariohysterectomy.

METHODS:

Eighteen dogs were randomly distributed to three groups of six animals each and received either electrical stimuli at acupuncture points (EA), at peri-incisional dermatomes (DER) and at both acupuncture points and peri-incisional dermatomes (EAD). Pre-anesthetic medication was acepromazine (0.05mg kg⁻¹, IV). Anesthesia was induced with propofol (4 to 5mg kg⁻¹, IV) and maintained with isoflurane. Postoperatively pain degree was measured using a numerical rating scale. Dogs were scored at 1, 3, 6, 12 and 24 hours postoperative. If the pain score was ≥ 6 , supplemental morphine (0.5mg kg⁻¹, IM) was administered. Serum cortisol concentration was measured before pre-anesthetic medication (basal), and at 1, 12 and 24 hours postoperative.

RESULTS:

EA and EAD- treated dogs had lower pain scores than DER treated dogs one hour postoperatively. Fewer EA and EAD-treated dogs required rescue analgesia. Serum cortisol did not differ among treatments.

CONCLUSION:

Preoperative application of electrical stimuli to acupuncture points isolated or in combination with peri-incisional dermatomes provides a reduced postoperative opioid requirement and promotes an effective analgesia in dogs undergoing ovariohysterectomy.