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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<sup>-1</sup>, IV). Anesthesia was induced with propofol (4 to 5mg kg<sup>-1</sup>, 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  $\geq 6$ , supplemental morphine (0.5mg kg<sup>-1</sup>, 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.