Abstract

This study aimed to investigate the cardiopulmonary and analgesic effects of propofol and propofol/ketamine infusion in bitches premedicated with atropine and xylazine and submitted to ovariohysterectomy. In six bitches, anesthesia was induced by 5mg kg-1 of propofol and maintained initially with 0.4mg kg-1.min-1 of propofol (GP). In the other six bitches, anesthesia was induced with a combination of 3.5mg kg-1 propofol and 1mg kg-1 of ketamine and maintained initially with 0.28mg kg-1.min-1 propofol and 0.06mg kg-1.min-1 of ketamine (GPK). Heart and respiratory rates, arterial blood pressure, minute ventilation, end tidal CO2, pulse hemoglobin O2 saturation, blood gas analysis, plasma glucose concentration and temperature were measured before and every 10 minutes during anesthesia. Mean arterial blood pressure reduced from 20 to 40 minutes of propofol anesthesia. Temperature reduction and hypercapnia with respiratory acidosis occurred in both groups during anesthesia. PaO2, bicarbonate and glucose increased only during propofol/ketamine anesthesia. Propofol infusion rate was increased by 50 and 20% during anesthesia in GP and GPK respectively to allow satisfactory surgical anesthesia. Both anesthetic protocols were safe and adequate for ovariohysterectomy in bitches, considering that controlled ventilation is performed when necessary and propofol infusion rate is adjusted to 0.6 and 0.34mg kg-1.min-1 in GP and GPK according to the surgical stimulus.

Keywords

Infusion, general anaesthetic, dissociative anaesthetic.