

Comparison of quality of anesthetic effect between intramuscularly administered ketamine, intravenously administered ketamine and intravenously administered propofol in diazepam premedicated goats

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Abstract:

This study aimed to evaluate intramuscularly administered ketamine, intravenously administered ketamine and intravenously administered propofol in diazepam premedicated goats. Nine native female goats divided into three groups (each of 3 goats) were premedicated with diazepam 1 mg/kg intramuscularly. Goats of group I were treated with ketamine (8 mg/kg) intravenously, while those of group II treated with ketamine (10 mg/kg) intramuscularly, and group III injected with propofol (5 mg/kg) intravenously. The mean anesthetic onset, anesthetic duration, and total recovery period were calculated. The mean heart rate (HR), respiratory rate (RR), rectal temperature (RT) and biochemical parameters also were recorded. Satisfactory anesthesia and immobilization (smooth induction, and smooth recovery) needed for surgical interventions of short duration were achieved in all groups. The induction was good and smooth in groups I and III. The quality of recovery was good in groups III and I and recovery is longer in group II. In conclusion, this study indicates that the 3 regimens are associated with acceptable anesthetic characteristics; Propofol IV is superior to ketamine because it provides uneventful onset and recovery which are more rapid than ketamine IV or ketamine IM, so reduces anaesthetic risk while administration of ketamine intravenously is superior to its administration intramuscularly.

COMPARASON OF TRAMADOL, LIDOCAINE AND TRAMADOL-LIDOCAINE COMBINATION FOR EPIDURAL ANALGESIA IN GOATS

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Abstract:

The aim of this study was to compare the analgesic effect of tramadol, lidocaine and tramadol-lidocaine combination injected in the epidural space in goats. Nine goats were used to compare the epidural analgesic effect of tramadol (3 mg / kg), 2% lidocaine (2.86 mg/kg) and tramadol-lidocaine combination (1 mg /kg and 2.46 mg kg, resp.). Loss of sensation was examined by pin-prick test. Onset time, duration, and degree of analgesia and ataxia were recorded after each treatment. Heart rate (HR), respiratory rate (RR), rectal temperature (RT), and biochemical parameters were recorded after all treatments. Time to onset and duration of analgesia, respectively, were as follows: tramadol 10 min and 225 min; lidocaine 4 min and 85 min and tramadol-lidocaine 4 min and 130 min;. Onset time and duration were significantly longer with tramadol and tramadol-lidocaine combination than the other treatment. Ataxia was not observed in tramadol and mildly observed in tramadol-lidocaine combination and was severing in lidocaine. HR, RR, and rectal temperature not had significantly differentiated from baseline after any treatment. Biochemical parameters returned to basal levels by four hours after all treatments. Tramadol and tramadol-lidocaine combination might be clinically useful to provide analgesia in goats for long-duration surgical procedures than lidocaine alone

