

Comparison of Sedative Effects Using Intermittent Intravenous Bolus Injection with Tiletamine-zolazepam, Xylazine-ketamine, Propofol in Beagle Dogs

Soo-Han Lee, Chun-Sik Bae¹, and Byung-Hyun Chung*

College of Veterinary Medicine, Konkuk University, ¹College of Veterinary Medicine, Biotechnology Research Institute, Chonnam National University

Materials and methods: To compare the sedative effects using intermittent intravenous bolus injection with tiletamine-zolazepam(n=5, TZ group), xylazine-ketamine(n=5, XK group) and propofol(n=5, PI group), we investigated the changes of hemodynamic(heart rate, arterial pressure), SpO₂, rectal temperature, respiratory rate and pain score during 60 minute sedation and 40 minute recovery period in beagle dogs.

Results: The value of rectal temperature was significantly high in PI groups(p<0.05) during recovery period. The value of heart rate was significantly lower in XK group(p<0.05) during sedation. The changes of respiratory rate were similar tendency in all groups. The change of SpO₂ was stable during sedation and value was significantly high in PI group(p<0.05) during recovery period. The value of systolic arterial pressure(SAP) was significantly lower in XK group(p<0.05) than PI group during sedation and recovery period. Low analgesic effect occurred in PI group.

Clinical relevance: We concluded that intravenous anesthesia by intermittent bolus injection with propofol is useful in stabilizing rectal temperature, SpO₂ and hemodynamic during sedation and provide fast recovery, but have low analgesic effect.

*Corresponding author: chungbh@konkuk.ac.kr