

## **Comparison of Cardiopulmonary Effects and Recovery between Total Intravenous Anesthesia with Propofol and Volatile Induction/maintenance Anesthesia with Isoflurane in Beagle Dogs**

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**Materials and methods:** To compare cardiopulmonary effects and recovery between total intravenous anesthesia (TIVA) with propofol (PRO group, n=5) and volatile induction/maintenance anesthesia (VIMA) with isoflurane (ISO group, n=5), we investigated changes of heart rate, SpO<sub>2</sub>, arterial pressure, rectal temperature and respiratory rate during 60 minute anesthesia and 40 minute recovery period in beagle dogs, and investigated recovery (extubation, head lift, sternal position and righting) after 60 minute anesthesia.

**Results:** Rectal temperature was significantly low in ISO group ( $p < 0.05$ ) from 10 to 100 minute. Heart rate was significantly low in ISO group ( $p < 0.05$ ) at 40, 50, 60 minute. Respiratory rate was significantly low in PRO group ( $p < 0.05$ ) at induction and 70 minute. SpO<sub>2</sub> tendency was similar. Systolic arterial pressure (SAP) was significantly low in ISO group ( $p < 0.05$ ) at induction and during anesthesia. Recovery was similar in two groups.

**Clinical relevance:** We concluded that TIVA with propofol is useful in stabilizing rectal temperature and arterial pressure during anesthesia and provide fast and stable recovery.

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