

# EVALUATION OF A CONTINUOUS RATE INFUSION OF PROPOFOL-KETAMINE FOR TOTAL INTRAVENOUS ANAESTHESIA IN ONE HUMPED CAMELS (*Camelus dromedarius*) AFTER XYLAZINE PREMEDICATION: A CLINICAL CASE SERIES

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## ABSTRACT

Seven adult dromedary camels were anaesthetised to undergo surgical procedures. All patients were premedicated with an intravenous (IV) administration of 0.2 mg kg<sup>-1</sup> xylazine. Anaesthesia was induced with 1.0 mg kg<sup>-1</sup> propofol (P) and 0.8 mg kg<sup>-1</sup> ketamine (K) given IV and was maintained with a continuous rate infusion (CRI) of 4 mg kg<sup>-1</sup> hour<sup>-1</sup> P and 3.3 mg kg<sup>-1</sup> hour<sup>-1</sup> K. Heart rate, respiratory rate, arterial blood pressure and quality of anaesthesia were recorded before and after xylazine administration (XA) as well as at 5 minutes after induction and every 10 minutes until the end of the procedure. Mean anaesthetic duration was 82.9 ± 16.0 minutes. Mean heart rate increased after induction and remained at relative constant levels during maintenance. Respiratory rate dropped after XA, but quickly returned the baseline level. Mean arterial blood pressure significantly decreased below baseline level after XA, but rose within anaesthesia maintenance, without reaching baseline values though. The mean recovery time was 37.6 ± 24.2 minutes. A very good level of surgical anaesthetic depth was achieved and maintained during all procedures, and all animals could be discharged safely after a smooth and uneventful recovery. This P-K CRI after XA seems to be clinically safe and effective in dromedary camels and provides very good operating conditions for major surgeries in this species. Still, further studies are necessary to evaluate more cardiorespiratory and haematological parameters to confirm the safety of this new technique.

**Key words:** Anaesthesia, camel, ketamine, propofol, TIVA