Induction of Anaestheisa in Camels (*Camelus dromedarius*) Using Propofol with or without Premedication

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ABSTRACT

Three intravenous anesthetic protocols based on Propofol as anaesthetic with or without premedications were evaluated in camels. For this purpose three groups of camel each of eight camels (each camel acted as its own control). The first protocol was achieved by using Propofol alone at dose rate of 2mg kg^{-1}, the second anesthetic protocol was carried out by administration of Propofol at 2 mg kg^{-1}+ xylazine at 0.25 mg kg^{-1}, and the third protocol was conducted using Propofol at 2mg kg^{-1} + xylazine at 0.25mg kg^{-1} + diazepam at 0.25mg kg^{-1}. Clinical parameters viz: respiratory and heart rates were monitored; some anesthetic phases were recorded; and plasma cortisol and glucose concentrations were measured as stress bio- markers. No significant changes in respiratory rate, during anesthesia course in all mentioned anesthetic regimes, however, heart rate was decreased in xylazine and xylazine with diazepam premedicated camels. The present study revealed that the duration of anesthetic phase with Propofol+xylazine+diazepam was longer than that with Propofol+xylazine. A significant decrease ($P < 0.01$) in plasma cortisol level and glucose concentration occurred during anesthetic phase in anesthetized premedicated camels and a significant rise ($P < 0.01$) was observed when animals recovered from anesthesia in all anesthetic regimes. It could be concluded that anesthesia obtained using Propofol with premedications such as xylazine or both xylazine and diazepam was safe, however, the anaesthetic protocol using Propofol with xylazine and diazepam was considered to be better than that achieved by Propofol and xylazine.

Keywords: Propofol, Xylazine, Diazepam, Camels