

The Use of Alfaxalone in Quaker Parrots (*Myiopsitta monachus*)

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Abstract: Alfaxalone is a neurosteroid anesthetic that acts on gamma-aminobutyric acid alpha receptors. The objective of this study was to evaluate the clinical safety and efficacy of alfaxalone (Alfaxan CD). Due to observed hyperexcitability in the subject animals when alfaxalone was the only drug used during the initial trials, premedication with midazolam was also evaluated during the final study. Ten adult Quaker parrots (*Myiopsitta monachus*) were assigned to 3 groups: 1) low dose alfaxalone 10 mg/kg (LD), 2) high-dose alfaxalone 25 mg/kg (HD), and 3) alfaxalone 10 mg/kg with midazolam 1 mg/kg premedication (AM), administered intramuscularly. Induction time, sedation quality, duration of action, and vital parameters, including heart rate, respiratory rate, and temperature, were recorded. All protocols achieved adequate sedation; however, muscle tremors and hyperexcitation were variable. The LD group had a significantly longer mean \pm SD induction time (13.5 ± 4.5 minutes) as compared to the HD (6.0 ± 1.3 minutes, $P = .002$) and AM (6.5 ± 2.9 minutes, $P = .006$) groups, while recovery time was significantly longer in the HD group (86.2 ± 13.4 minutes) than the LD group (44.4 ± 10.8 minutes, $P < .001$). Midazolam premedication resulted in reduction of both muscle tremors and hyperexcitation associated with alfaxalone administration, but the recovery time was significantly longer (103.5 ± 15.1 minutes, $P < .001$) than for the LD group. Alfaxalone as a sole agent resulted in muscle tremors and hyperexcitation during induction, which was attenuated by premedication with midazolam. Further investigation is warranted to characterize the effects of alfaxalone and drugs used to premedicate Quaker parrots.