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## **Effects of trazodone on behavioral and physiological signs of stress in dogs during veterinary visits**

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### **Abstract**

The objective of this study was to determine the efficacy of trazodone in reducing stress in dogs during veterinary visits. Twenty dogs with a history of anxiety during veterinary visits were scheduled for two veterinary visits one week apart and randomly assigned to receive either oral trazodone (9-12 mg/kg) or placebo before the first visit and the other treatment before the second visit.

Owners administered the treatment 90 minutes before the car ride to the veterinary clinic. During each veterinary visit, we gathered information from owner surveys of OSS (owner stress score) and DSS (dog stress score), investigator evaluations of dogs' behavior, analyses of video-recordings, components of heart rate variability (HRV), and serum cortisol levels.

Owner-reported DSS was significantly lower when the dogs were on trazodone during the physical examination ( $p=0.005$ ), yet not significant at other conditions. There were no significant differences between the treatments in OSS and investigator-reported scores of dogs' sedation, aggression, and compliance levels. When the dogs received trazodone, standard deviation of normal-to-normal R-R intervals (SDNN), root mean square of successive heartbeat interval differences (rMSSD), and respiratory rate were lower, and heart rate was higher ( $p<0.001$ ).

Based on video analyses of the dogs while in the exam room, dogs' level of stress was significantly less when on trazodone ( $p<0.001$ ). There were no significant differences in serum cortisol levels between groups. These findings show evidence that trazodone is effective in reducing some measurements of dogs' stress levels during veterinary visits.