

Cardiology

C15 - Hemodynamic, Echocardiographic, Electrocardiographic, and Behavioral Effects of Oral Trazodone in Healthy Dogs



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Research Abstract - Oral Presenter(s)



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Abstract: Oral trazodone is used as an anti-anxiety medication in dogs prior to veterinary visits; however, the effects on cardiac diagnostics are not well studied. The purpose of this study was to investigate the effects of oral trazodone on blood pressure (BP), echocardiography, electrocardiography, and behavior in healthy dogs.

15 healthy, client-owned, adult dogs aged 1-8 years were enrolled in this prospective, double-blinded, placebo-controlled, crossover study. Dogs were randomized to receive placebo or trazodone (9.2-11.2mg/kg) orally 90-120 minutes before arrival. Physical examination, Doppler BP, electrocardiogram, echocardiogram, and 24-hour Holter placement were performed. After a minimum 7-day wash-out period, diagnostics were repeated with the alternate treatment. Stress scores were obtained using owner questionnaires and a blinded review of video obtained during visits. For normally distributed data, a two-sample t-test for comparison of means between drugs was performed.

Blood pressure was significantly decreased following trazodone (mean \pm SD, 128.7 \pm 22.3 vs. 143.4 \pm 26.61, $p = 0.02$). Measurements of left atrial size, left ventricular size and function, and corrected QT interval were not significantly different. Average 24-hour heart rate was not significantly different. Median (interquartile range) of ventricular ectopy was 0 (0-2) for both groups. Owner-reported stress and average video-scored stress were significantly decreased following trazodone ($p = 0.005$ and $p = 0.003$). Adverse effects reported with trazodone were sleepiness (12/15), decreased appetite (4/15), and ataxia (1/15).

In conclusion, a single, oral, pre-visit dose of trazodone is well-tolerated and reduces signs of stress in dogs. Trazodone causes mild reduction in BP and clinically insignificant echocardiographic and electrocardiographic changes.