



**VETERINARY BEHAVIOR SYMPOSIUM  
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## **Efficacy of dexmedetomidine oromucosal gel to attenuate anxiety in client owned cats presented for routine veterinary care**

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### **Abstract**

The decline in feline veterinary visits is due, in large part, to the perceived stress associated with travel and examination; anxiolytic therapy could help facilitate veterinary visits. In this study, the effect of dexmedetomidine oromucosal gel on owner ratings of behavior during travel and on physiological measures and tractability scores during veterinary exams was evaluated.

Each cat received both dexmedetomidine oromucosal gel and placebo in randomized order 20 minutes prior to departure to the veterinary clinic. Upon arrival, an investigator administered a second dose of dexmedetomidine oromucosal gel or placebo based on behavioral assessment. After 20 minutes, a veterinarian conducted a standardized physical exam. The same protocol was followed for each visit. Outcome measures included owner and veterinary ratings, cat stress scores (CSS), and physiologic measures (temperature, heart rate, respiratory rate, blood pressure).

30 cats were included in the study. No significant differences were found between owner ratings for aggression ( $p=0.663$ ), vocalization ( $p=0.145$ ), and CSS ( $p=0.021$ ) during travel. No differences were found between investigator ratings for aggression ( $p=0.523$ ), sedation ( $p=0.500$ ), or CSS ( $p=0.676$ ). No differences were found between owner and veterinary ratings during examination (all  $p>0.1$ ) or for any physiologic measure (all  $p>0.1$ ). The most common adverse events were hypersalivation ( $n=16$ ) and mild ataxia ( $n=7$ ).

In this study, administration of dexmedetomidine oromucosal gel to cats resulted in no significant difference in travel or veterinary exam anxiety, compared to placebo. Further studies are recommended to evaluate the effect of dexmedetomidine oromucosal gel administered more than 20 minutes before stressful events.