Treating Travel Tribulations

There is little published research on stress and anxiety in pets during car travel, although transportation has been shown to be stressful for many animals. Acepromazine has been the traditional drug prescribed for cats and dogs requiring sedation, but it has poor anxiolytic activity and produces marked sedation. Anecdotal reports describe tricyclic antidepressants or selective serotonin reuptake inhibitors for use in traveling dogs or cats. This study sought to document changes in physiologic variables (cortisol, neutrophil–lymphocyte ratio, heart rate) and behaviors observed in dogs during ground transport and to measure whether these variables changed after short-term clomipramine administration. Twenty-four beagles were randomly assigned to clomipramine (2 mg/kg Q 12 H) or placebo groups and were subjected to truck transport on 3 separate occasions, each lasting 1 hour. Tablets were administered 3 days before travel, on the day of travel, and for 3 days after travel to achieve a steady state for clomipramine. Cortisol levels were increased in both groups, although the animals treated with clomipramine had significantly lower levels than the placebo group. The pretransport neutrophil–lymphocyte ratio and the increase after transport were also lower in the clomipramine group, although not significantly. The average heart rate in the clomipramine group was significantly lower than in the placebo group. No significant differences could be detected between treatments for most behavioral data, although clomipramine tended to reduce “moving and panting” and drooling. In addition, the authors noted that the treated dogs appeared calmer than controls. The authors conclude that short-term clomipramine administration appears to slightly reduce fear or anxiety in dogs during transport and may be an appropriate drug choice for this use. Further studies are needed to confirm this finding, as well as to determine appropriate dosage.

COMMENTARY: Owners frequently request medication for pets when taking them on trips. Options until now have been fairly limited: dimenhydrinate (Dramamine) and acepromazine being foremost, neither of which are anxiolytic drugs. This study does a good job of minimizing many variables in an attempt to scientifically confirm anecdotal reports that clomipramine may be another option for travel-anxious pets. While having to give the drug over the course of several days is a drawback, clomipramine would be particularly useful in animals for which dimenhydrinate is insufficient or acepromazine is contraindicated. It would be interesting to see whether further studies show dosing over this length of time is not necessary. In the meantime, clomipramine appears to be a reasonable option to provide comfort for animals that suffer during travel.

—Jennifer L. Schori, VMD


Osteoarthritis: Less Weight, More Relief

This study used client-owned dogs to evaluate the effects of a weight reduction program combined with basic or more complex physical therapy on overweight dogs with osteoarthritis. Subjects had a body condition score of 4 or 5 based on a 5-point scale. Owners were instructed to feed 60% of a calculated maintenance energy requirement based on a body weight that was 15% less than that recorded at the dog’s first evaluation. All dogs were fed the same commercial reduced-calorie food. Owners were asked to provide a routine of massage, passive range-of-motion exercises, and leash walking of their dogs. One group of dogs had a more intensive physical therapy program, including receiving transcutaneous electrical nerve stimulation (TENS) treatments. Both groups had significant weight loss, but the group that received the TENS treatments lost more weight. Both groups also had improved mobility and symmetry indices of ground force reactions, but the group with the more intensive physical therapy program had the best outcome. Study supported by P&G Pet Care

COMMENTARY: Although most clinicians are intuitively aware that weight loss in overweight or obese animals with osteoarthritis is of clinical benefit, before this article was published only one report in the veterinary literature demonstrated that association. These authors included two levels of exercise regimens to the weight loss programs, showing added benefit of both weight loss and exercise for dogs with chronic osteoarthritis. The study provides further evidence that interventions at home or in a rehabilitation program can have positive benefits for animals with this chronic and debilitating disease. It is possible that the increased owner involvement contributed to the success in both groups.

—Katherine S. Gloyd, DVM