HIGHLIGHTS

- Bacterial endocarditis is primarily a disease of middle-aged or older large-breed dogs.
- There is typically high morbidity and mortality.
- Although there is insufficient evidence linking dental disease to endocarditis, antibiotic prophylaxis is still standard for medical and legal reasons.
- The varied and often nonspecific clinical signs and course of the disease make diagnosis difficult.

Bacterial endocarditis is a rare disorder in dogs that can cause serious consequences and mortality. It affects primarily middle-aged to older large-breed dogs that present with a combination of nonspecific signs of systemic illness, including depression, weakness, lethargy, weight loss, anorexia, and intermittent or shifting lameness. A febrile dog with a new heart murmur is considered a classic presentation, but these findings may be overemphasized; in one study, fewer than half had a new or previously diagnosed heart murmur at presentation. Echocardiography is used for diagnosis, but endocardiosis of the mitral valve can appear similar to—even indistinguishable from—mitral valve endocarditis. Cultures of the urine and blood should be obtained when the dog is not on antibiotic therapy and treatment should be based on culture and sensitivity results. Bacteria are shielded from standard antibiotic treatment regimens so high serum levels of bactericidal agents are required. Intravenous therapy is indicated for 1 to 2 weeks and then continued as subcutaneous or oral treatments. Dogs should also be treated for congestive heart failure, acid-base imbalances, and fluid and electrolyte imbalances. Dogs with bacterial endocarditis are occasionally not diagnosed and are given glucocorticoids, which result in improvement for the first day or two, but then clinical signs will worsen. Prognosis for all dogs with bacterial endocarditis is poor to grave.


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Pheromones in Storm Phobia

Twelve storm-phobic dogs (2 neutered males and 10 neutered females) were included in an open, pilot study of dog-appeasing pheromone (DAP) and behavior modification as a treatment for storm phobia. The dogs were owned by faculty, staff, and students at the University of Georgia College of Veterinary Medicine. The dogs were at least 6 months of age and did not have a history of aggression, health problems, or other behavioral issues. They exhibited at least 1 of the following storm phobia behaviors on 3 different occasions during storms: elimination, excess salivation, excess vocalization, destructiveness, hiding, pacing, panting, self-trauma, staying near the owner, or trembling. A Storm Phobia Assessment (SPA) questionnaire was completed for each dog. The treatment protocol included DAP diffused continuously where the dog spent most of its time, behavior desensitization, and counter-conditioning with storm CDs. The owners kept diaries of the dogs’ behavior during the next 4 to 12 storms. A second SPA questionnaire was completed. Nine of the 12 dogs showed a significant decrease in their SPA scores (5%–75%), 2 showed an increase, and 1 did not change. DAP combined with behavior modification may improve the signs of storm phobia. The potential for relief to both owners and dogs with this protocol is worth further investigation. This was a pilot study, and further research is needed to confirm the results.

COMMENTARY: This study appears to be tight, well designed, and well executed. Controversy has surrounded the use of pheromone products in dogs and cats, so it’s great to see this type of research being done. The results are clear and show that the use of the DAP diffuser—along with other behavioral therapy, such as desensitization to storm sounds—can improve the behavior of some dogs with storm phobia. As the general practitioner knows, dogs with storm phobia can be very difficult to treat. It’s helpful to have data that can lead them to a product likely to provide for some success.—Terry Marie Curtis, DVM, MS, Diplomate ACVB

Pheromones: Recent advances and clinical cases. Crowell-Davis S, Irimajiri M. NAVC PROC 2008, p 141.