

Use of Behavioral Interventions for Epilepsy in Dogs

Evidence from human medicine suggests that canine epilepsy can be better managed with the addition of behavioral interventions.

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Successfully managing canine epilepsy is a huge challenge since 20–30 percent of epileptic dogs do not respond adequately to traditional anti-epileptic drug (AED) use. Non-pharmacological additional control including dietary management, vagal nerve stimulators, dietary supplements, and behavioral interventions is a promising new area of study which aims to further reduce seizure activity by diminishing the stress and anxiety experienced by canine epileptic patients that can either cause or be caused by inadequate seizure control.

A United Kingdom study is investigating behavioral interventions used for seizure control in humans and how those methods might apply to both reducing seizures in dogs while improving their quality of life (QOL). Complicating both human and canine seizure control is that many psychogenic medications used to address stress, depression, and anxiety are contraindicated in epileptic patients. In addition, the side effects of many anti-epileptic drugs present significant health threats to both humans and dogs.

Human Studies

As an adjunct to traditional AED behavioral approaches for epileptic humans, behavioral interventions have shown great promise in both reducing seizure frequency and improving psychological and emotional health. Progressive muscle relaxation, yoga, biofeedback to counteract an impending seizure, and behavioral and cognitive therapy have all shown to reduce seizure frequency and lessen depression while giving patients greater seizure control with reduced stress.

Veterinary application

Epileptic dogs lacking adequate seizure control are at risk for attention-deficit hyperactivity disorder (ADHD)-like behavior, severe anxiety, and premature cognitive changes and decline. These behaviors can have a significant effect on the QOL of both the dog and the client. Proper use of trigger management to control response to provoking stimuli can teach clients to recognize and avoid these. Systematic

desensitization to locations or situations that may trigger seizures can help as well. Since stress is suspected to be a major contributor to ongoing seizure activity in dogs, punishment-based training techniques should be avoided.

Client education is mandatory to help them recognize their role in helping their dogs. Identification of prodromal behaviors can allow for structured relaxation activities to lessen arousal and overstimulation, thus helping to interrupt impending seizure activity.

Conclusions

To date, most applications of behavioral interventions for canine epileptics have been empirical, leading to the need for multi-center, double-blinded, placebo-controlled studies. The success of some of these therapies points to the need for general practitioners and neurologists to incorporate the expertise of a behaviorist in the total seizure management plan for each patient. The client's role in the recognition of pre-ictal behaviors and the successful application of helpful behaviors interventions is crucial to the success of seizure management.