

FEARS, PHOBIAS AND ANXIETIES IN DOGS

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Many behavior problems in dogs are a result of underlying fears or anxieties. Fearful and anxious dogs present a challenge to practitioners and owners alike. Their presentation can be variable, from hiding, shaking, panting and pacing to aggression. Dogs with fearful or phobic behaviors can pose risks to people, property, themselves and other dogs. Treatment protocols include habituation, desensitization and counter-conditioning.

Fear

Fear is the interaction of physiologic, emotional and behavioral responses'. Whether an animal behaves fearfully in a situation or is influenced by its environment, past experiences, its species and age. Typical fear responses include freezing, fleeing, fighting and fidgeting. Fears are not necessarily maladaptive, but can be if they interfere with quality of life and the pet-owner interaction. Fears can potentially be prevented by adequate early socialization, ongoing exposure to people and places and the owner response in potentially fear evoking situations. When a fear of a specific stimulus generalizes over time, a phobic response is possible. Strong aversive experiences can lead to long lasting fearful or phobic responses that may be difficult to change. While fear might not be maladaptive, phobic responses are often maladaptive and out of proportion to the level of danger.

Fears can develop for many reasons including but not limited to genetics, traumatic early experiences, inadequate early exposure, repeated exposure to fearful stimuli or owner fostering". Behavior indicative of fear is often maintained by genetic factors, ongoing exposure to the stimulus and owner responses. Not only does continued exposure to the stimulus exacerbate the fearful response, learning is also a factor in the maintenance of fearful responses. If the animal responds by avoidance and/or aggression and the feared threat is avoided or chased away, the response is reinforced and is therefore likely to occur again. In addition, any anxiety or punishment by the owner may increase rather than decrease the fear or anxiety of the pet. Owners who respond confidently and with a happy vocal intonation and relaxed body posture help animals adjust to new and potentially fearful situations.

Fears can often be divided into the following categories:

- Fear of inanimate cues
 - Certain cues precipitate fears
 - Conditioning via pairing w/ fear inducing event
- Fear of living things
 - Strangers, other animals
 - Change affect, posture and activity
- Fear of situations
 - Separation anxiety, veterinary visits, car rides

History taking for behaviors indicative of fear must include the eliciting stimuli (what, where, when and who), people and/or locations, and the posture and facial expressions of the pet. Detailed descriptions of episodes can help identify important issues and help in the formulation of the treatment plan. At times it may be helpful to look for both initiating factors and maintenance factors for the behavior. In addition any and all treatment attempts should be noted and discussed.

Diagnosis is based on the history of behaviors indicating fear, body postures and actions. It is often helpful to categorize fears as situational, fear of animate stimuli or inanimate stimuli as described above. Carefully delineating the contexts and situations will help with formulation and implementation of a treatment plan.

Treatment includes avoidance of fear inducing situations, cessation of counterproductive treatment methods, change the owner response and teach the animal new responses. The goal of treatment is to teach the animal to experience the fear-inducing stimulus without being afraid. Generally this is accomplished using various behavior modification techniques including counter-conditioning, desensitization and habituation. Another treatment modality that is occasionally used is William Campbell's "jolly routine"³. This involves owners "switching gears" and engaging the pet and themselves in activities that make the dog happy and wag its tail. For some dogs with extreme fears and to facilitate learning and training, drug therapy may be indicated. The goal is to enable the dog to work with a treatment plan and learn how to respond appropriately in the presence of the stimuli. Overall, drug therapy alone will not eliminate behavior, but may merely suppress it.

Phobias

A phobia is an excessive and persistent fear of a specific stimulus or situation. The most common phobia that dogs exhibit is thunderstorm and noise phobias. Any animal can develop a phobia to most any situation or stimulus.

Thunderstorm phobias present a challenge to owners, veterinarians and behaviorists. Many dogs that exhibit thunderstorm phobia have very intense symptoms. These can include panting, pacing, whining, drooling, hiding, and destruction. They will often go through windows and doors and sustain injury in the process. Because of this intense behavior, these dogs can be dangerous to themselves.

Treatment of fears and phobias

The basic treatment modalities used are counter-conditioning and desensitization. These two techniques work together to help change the animal's behavior. Counter-conditioning (also called counter commanding and response substitution) is teaching the dog a response that is incompatible with a fearful response. Desensitization works by placing the fear-inducing stimuli along a gradient and gradually exposing the dog to the stimuli in such a way as to minimize the fear. Punishment is contraindicated in the treatment of fear-induced behaviors because while punishment may stop the dog from showing the fearfully motivated aggressive displays, the underlying cause of the fear is still present and may manifest in other ways. Or, the dog may learn not to signal their aggressive intent, but rather lunge and bite without warning. Treatment is greatly facilitated if the dog is fitted with a Gentle Leader headcollar.

Dogs with fearful responses and who are also aggressive, pose a risk not only to family but also to the public and therefore the owner must be made aware of these risks before therapy is undertaken. It is essential for the owner to understand when the aggression can occur and take the responsibility to see that the dog is prevented from injuring anyone. This can be accomplished with confinement when appropriate, a leash, a Gentle Leader® headcollar and/or a muzzle. Although we hope to change the responses of the pet, the owner must be aware

there is always a chance that the dog could bite. Even once the dog responds to therapy, it must be monitored in situations where fearful responses have occurred and removed at any signs of fear, anxiety or aggression. Also if the situation changes, retraining may be necessary to reinforce previously learned responses. In reality aggressive dogs are controlled but rarely cured.

To start the counter-conditioning program the owners must teach the dog to sit, stay and relax on a verbal cue for a food reward. The food should be something highly desirable to the dog to increase compliance and motivational change. Therefore it is helpful to create a reinforcer gradient i.e.. identify various reinforcers and their importance to the pet. When treating fears and phobias, the reinforcer used should be of high value and highly desirable to the pet. These should only be used for training sessions and withheld at other times.

While we are teaching the dog an obedience task sit and stay, it is the motivational state that is most important. In other words, the dog must be relaxed and happy while performing the task. Our goal is to reduce arousal level so learning can occur and new responses can replace undesirable ones. What is additionally important is that the dog practices the task in multiple locations. The owner must practice in all sorts of locations including the one where fear-induced behaviors may take place (without the fear-inducing stimulus being present). Once the dog knows the sit/stay/chill well. The owner must begin to phase out food rewards while always rewarding with praise. Finally the food rewards become intermittent and random. Once the dog knows how to do the sit/stay/chill well the owner and pet are ready for the next phase of the program, which is the desensitization.

Before starting, it is important to arrange the fearful stimuli along a gradient, from low to high. In other words start with those situations, people or places that are least likely to cause a fear-based and/or aggressive response to the situation that most likely will cause the fear-based/aggressive response. Keep in mind that distance, volume, distinguishing characteristics such as hats, height, gender and actions (reaching, running, talking), inanimate stimuli such as bicycles, should all be considered and factored into the gradient. Begin by exposing the dog to the stimuli least likely to cause a response and let the dog succeed and be rewarded with food for remaining calm and quiet while in the situation. If the dog has been successful, gradually move up the gradient each time only continuing if the dog is able to settle and relax without a fear-based or aggressive response. It is extremely important that owners are aware of early signs of anxiety or aggression in their dog. They must always be watching the pet for any signs of aggression or anxiety and reduce the stimulus intensity at the very first sign of either. Continuing exposure when the dog is experiencing anxiety or aggression undermines the learning process. In addition, rewarding the incorrect response may lead to the pet learning the incorrect behavior. For this reason, progress can be extremely slow and owners must be committed to long-term treatment.

During retraining it is helpful if exposure to the fear eliciting stimuli can be minimized to decrease further inappropriate responses. This may mean confinement with company, curtailing walks, or limiting exposure to certain stimuli. Owners must also avoid punishment if they should encounter the stimulus as this can increase anxiety or fear. If the owner and pet do encounter the stimuli the owner should intervene and attempt to calmly and quietly leave the situation using favored rewards to help reduce arousal.

Thunderstorm phobias are also treated with counter conditioning and desensitization techniques. First the dog is taught to relax on a verbal command and if possible in a specific location such as a mat or rug. Gentle Leader headcollars can facilitate training and calmness during storms situations. The basic treatment modality is to obtain a recording of a thunderstorm, and play it at low intensity and reward the dog for non-anxious, fearful

behavior. The lightening and the drop in the barometric pressure frighten some dogs; two conditions difficult to simulate in training. With time, some dogs will learn to attenuate their response, and will tolerate storms. Treatment must take place outside of thunderstorm season because ongoing exposure to the stimulus makes desensitization difficult. It is also helpful to attempt to mute the sounds of the storm and minimize exposure. Teaching the pet to settle and remain calm in response to a command and in a specific location prior to storms gives owners and pets a tool to use during storms as well.

During thunderstorm season drug therapy can be helpful. Medication that address the anxiety seem to work best and include long acting benzodiazepines. Clorazepate dipotassium has been used by some behaviorists with limited success. Dosages recommended are 5.6 -22.5 mg./dog s.i.d to b.i.d. The lower dosages are for smaller dogs; very small dogs may need to have the lower dose of 5.6 mg/day.⁴ In other cases diazepam might be useful at 0.5 to 2.0 mg/kg every 4-6 hours⁵. Recent evidence has shown daily treatment during thunderstorm season with a tricyclic antidepressant such as Clomipramine and the addition of a benzodiazepine during thunderstorms in conjunction with behavior modification to be efficacious.⁶

With accurate diagnosis and a well-designed treatment plan fearful dogs can improve. The keys to successful resolution include precise identification of the eliciting stimuli, teaching relaxation and increased owner control, gradual exposure to the fear producing stimuli without producing the unwanted response and good avoidance of the stimuli until new responses have been learned.

Anxiety

Anxiety is the anticipation of danger. Yet, anxiety can be diffuse without an apparent distinct cause or threat⁷. Usually visual scanning, inability to relax and nervous responses characterize anxiety. Anxiety can be situational or contextual and for some animals continuous or global. Anxiety can be mild or can be so severe as to interfere with function.

Dogs that show anxiety may pace, be hyper-vigilant, hide or avoid, pant, drool or shake¹⁴. Their behaviors may also include vocalization such as whining or barking. Often dogs will exhibit a lowered body posture, tucked tail and ears against the head. In many cases the animals are inappetent, and cannot sleep. In extreme situations elimination behavior may be affected. Physiologically an anxious animal may tremble, experience tachycardia or tachypnea. Affected animals may exhibit gastrointestinal signs. Pupillary dilation, peripheral vasoconstriction and piloerection may also be evident due to an increase in sympathetic nervous system activity.

Early learning and genetics can effect anxiety⁷. Negative experiences during development can contribute to anxiety later in life. If that same experience is repeatedly encountered anxiety and apprehension may occur through sensitization. Stimulus intensity and frequency of encounters may compound the response⁷.

Anxiety can be caused by a number of factors including but not limited to: visitors, new babies, moving, loud noises, new objects and changes in routine. Initiating factors may include lack of early exposure, a single traumatic event, uncertain relationship with the owners and inconsistent cues and discipline. Underlying anxieties may be components in other behavioral disorders such as aggression, housesoiling, and excitable behaviors⁹.

History taking

In anxiety conditions a comprehensive history taking is essential. The history should include anxiety symptoms (hiding, decreased social interactions, decreased play, appetite and/or sleep), decline in overall activity, and other nervous or anxious behaviors. Pet-owner interaction should be examined. Identifying the

anxiety producing stimuli is helpful, but in some generalized cases difficult. Any concurrent aggressive behaviors should be identified and discussed. Information should be obtained to rule out other causes of anxiety conditions, keeping in mind that several anxiety conditions can occur simultaneously. Finally, the owner response and previous treatments must be explored and discussed.

Diagnosis

Diagnosis is based on the history of anxiety symptoms and reactions. Differential diagnosis should include separation anxiety, cognitive decline (USA Cognitive Dysfunction). Medical causations (hypothyroidism, Cushings). Multiple anxiety conditions can co-exist and are often referred to as generalized or global anxiety⁹.

Treatment

Treatment of anxiety conditions has many phases. First it is most important to try and limit the exposure to the stimuli that elicit the anxious condition. This can be through avoidance or removal of the stimulus if possible. Alternately changing the presentation of the stimulus may temporarily decrease the anxious response.

Next, it helps to create a stable, predictable and safe environment for the pet. How this is accomplished varies with the type of anxiety and the anxiety provoking stimuli. Treatments used include increasing owner control, ignoring attention seeking behaviors and set rules and expectations for interactions. Daily walks, playtime and training are important and must be added into the pet-owner routine.

Inherent in changing anxiety is shaping alternate behaviors. The goal is to teach the animal to experience the anxiety-provoking stimulus and remain in a non-anxious state. One technique is to teach the pet to relax on a verbal command as described earlier in this paper. This must be taught in locations and situations where the pet does not experience anxiety. Often food is used to facilitate a change in emotional state. This is not an exercise in "stay" but rather an exercise in relaxation. This is counterconditioning.

The next phase is gradual introduction to the anxiety producing situations as low level not likely to cause the anxious response. The owner requests that pet to assume the relaxed posture and then rewards the behavior with food and/or praise. Exposure is gradual with the intensity of the stimulus only increased once the pet has mastered the lower level of exposure.

The owner must also learn to respond in a new manner. Reactions such as scolding, jerking, leash-tighting, punishment and any aversive response must be avoided. The owner should use a "happy voice" and relaxed body postures to help the pet learn that the situation is non-threatening. Additionally, the owner should avoid reinforcement of inappropriate responses through their body posture or vocal intonation.

⁹Voith. VL. Borchelt, PL. Fears and Phobias in Companion Animals. In: Ed. Voith and Borchelt Readings in Companion Animal Behavior, Veterinary Learning Systems, Trenton, NJ pp 140-152.

² Askew. HR. Treatment of behavior problems in dogs and cats. Blackwell Science, Oxford, 1996 pp 206-207

¹Campbell, WE. Behavior Problems in Dogs. American Veterinary Publications, Inc. Goleta, CA, 1975, pp 205-20

¹⁰Overall KL. Behavioral Problems in Small Animals (St. Louis: Ralston Purina, 1992)36-51.

¹¹Overall, KL Noise Phobias in Dogs In: BSAVA Manual of Canine and Feline Behavioural Medicine. Eds: Horwitz. Mills & Heath. (BSAVA, Gloucester, 2002.) pp. 170

¹² Crowell-Davis, SL. Seibert, L. Sung W. Curtis, T, Parthasarthy, V. Treatment of storm phobia with a combination of clomipramine. Alprazolam and behavior modification: a prospective open trial. Proceedings AVSAB meeting, July 2001. pp.5.

¹³ Mertens. PA. Dodman. NH "Pharmacologic treatment of fear and anxiety in animals. In: Psychopharmacology of Animal Behavior Disorders, Ed. Dodman & Shuster, Blackwell Science, Maiden, MA, 1998. Pp. 122. ⁸ Overall, KL. Clinical Behavioral Medicine for Small Animals, Mosby, St. Louis. 1997, pp. 215 ⁹ Olivier, B. Miczek, KA. "Fear and Anxiety: Mechanisms, models, and molecules" In: Psychopharmacology of Animal Behavior Disorders, Ed. Dodman & Shuster, Blackwell Science, Maiden, MA. 1998. Po.106.