I’m A Prisoner In My Own Home
Diagnosing and Treating Separation Anxiety, Storm Phobia and Confinement Anxiety

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Separation anxiety, storm phobia and confinement anxiety (barrier frustration) commonly occur together. The reason for the association is unclear at this time. Hereditary and environmental factors may contribute. Dogs may simply be predisposed to anxiety related behaviors once they have an anxiety disorder leading to the development of other disorders. Dogs may learn to be anxious during storms and in the crate because they associate these frightening events with the owner’s absence. These dogs may also simply be hyperattached dogs who when they experience any stressful event without the owner are thrown into a panic. A study (Overall, Dunham, Frank, 2001) which looked at the incidence of these diseases, found that dogs who had storm phobia or noise phobia had a high probability of having separation anxiety while the probability that dogs with separation anxiety would have noise and storm phobia, was not as high as the reverse.

All three diagnoses involve a physiologic stress response triggered by anxiety. While separation anxiety is the only diagnosis of the three that has hyperattachment as a causative factor, hyperattachment can worsen the prognosis for dogs who have either storm phobia or confinement anxiety. For storm phobia and separation anxiety, medication is a key treatment component because the stimulus (owner departure, storms) cannot be controlled allowing for proper desensitization and counterconditioning to the stimulus.

The stress response is an important element of the intensity of the dog’s reaction whether it be to the owner’s departure, a storm or confinement. The acute stress response is a graded based on the perceived difficulty, resulting frustration/conflict, coping strategy and the perceived control over the situation. When considering the factors affecting the stress response, it is easy to imagine how stressful a storm must be for a dog. When a dog experiences a stressful situation daily they can develop a chronic stress response due to chronic exposure to circulating catecholamines and cortisol. This can lead to immunosuppression, muscle wasting and increased reactivity.

The incidence of separation anxiety varies from 20-40% depending on the study that is referenced. Separation anxiety is severe distress during owner’s absence or perceived absence. Often dogs exhibit hyperattachment to one or more family members, increased following and exuberant greeting behavior. Some dogs show distress only when completely alone while others show distress when a certain person leaves the house regardless of whom is home with the dog. Separation anxiety can present at any age from puppyhood to geriatric. It can be triggered by traumatic events, history of relinquishment to a shelter, age related changes, environmental stress, hereditary factors and the behavior of the owners. The clinical signs include: hypersalivation, urination, defecation, vomiting, panting, self mutilation, destruction, attempts to escape, aggression, pacing, immobilization, injury, and vocalization.

Storm phobia is an irrational fear of thunderstorms regardless of the owner’s presence. Dogs may become distressed at any point in the thunderstorm sequence including with changes in barometric pressure. Unlike separation anxiety and confinement anxiety, storm phobia generally
is first diagnosed in young adult or middle aged dogs. Clinical signs include: panting, pacing, whining, destruction, escape attempts, hypersalivation, attention seeking, hiding, height seeking, and elimination. This disorder often starts as noise phobia where the dog only reacts to the thunder. Then, over time the dog chains the various stimuli together until he is reactive long before there is a crack of thunder.

Confinement anxiety (barrier frustration) is an irrational fear of confinement. Dogs may be comfortable in a crate or small room when the door is open, but if the crate door is closed or a baby gate put up in the doorway, they show signs of panic regardless of the owner’s presence. Dogs can present with this disorder at any age, even puppyhood.

Separation anxiety, storm phobia and confinement anxiety share clinical signs with various disorders such as noise phobia, frustration related destruction, normal territorial behavior, canine cognitive dysfunction and incomplete housetraining. In addition, medical diseases that cause diarrhea, polyuria and polydypsia can complicate diagnosis. Because so many behavioral disorders and complicating medical diseases can masquerade as separation anxiety, whenever possible, a videotape should be requested.

All three disorders are treated similarly to any behavioral disorder with preventative measures, safety recommendations, behavior modification, management changes and medications when needed.

Preventative measures include proper socialization of puppies to separation, confinement and sounds before 14 weeks. Then, as the puppies age, continued positive exposure to these elements remains important. Puppies shipped by air may be at risk for storm phobia based on one study. It is always helpful for the dog to have a positive, structured relationship with the owner as well as basic obedience skills.

Although none of the disorders discussed here involve aggression as a primary clinical sign, dogs who are panicking may act aggressively when the owner tries to move them or tries to leave the house. In general, when writing treatment plans for behavior cases, the dogs should be screened for aggression and safety recommendations should be made accordingly. Safety recommendations are simple. The veterinarian should make a list of the times that the dog is aggressive and give the owner alternate strategies to avoid those situations. For example, if the dog is aggressive to the owner when she picks up her purse to leave the house as in separation anxiety, the veterinarian can recommend that the dog go into another room before the owner picks up her purse or that she put her purse in the garage earlier in the departure sequence.

Management changes are especially important when treating separation anxiety, storm phobia and confinement anxiety. General recommendations include: discontinuation of confinement, use of doggy daycare/day boarding during initial behavior modification period, food toys during stressful events, reduction of anxiety with medications, SIT exercises, establishment of a safe zone, and relaxation exercises. Behavior modification changes include: counterconditioning, desensitization, discontinuation of punishment and redirection techniques.
Once the veterinarian has made a behavioral diagnosis, the focus turns to first line treatment which includes assessment of health (physical examination and labwork), first line behavior modification and management changes and medications. When deciding to institute pharmacologic therapy, the veterinary should consider four basic questions: 1) Is the environment substandard for a positive outcome? 2) What is the animal’s latency to arousal? 3) Is the animal’s quality of life affected? 4) Is the animal at risk?

While it is impossible to predict how diligently a particular client implement the behavior modification and management changes, certain factors can be considered when assessing the adequacy of a particular environment. Veterinarians should consider the presence of young children, the number of caretakers in the house, the number of hours that the dog has to be left alone during the day and the owner’s willingness to participate. If the household is clearly deficit in the qualities needed for a positive outcome, medication should be strongly considered as a part of the treatment plan.

The latency to arousal is the amount of time that it takes for the animal to mount a stress response once the owner has started her morning routine. For example, if the dog begins to show signs of stress when the owner picks up her keys, the dog has a long latency to arousal. If the dog shows signs of stress when the owner’s alarm goes off or when she takes a shower (early in the departure sequence) she has a short latency to arousal. Dogs with a short latency to arousal should be considered candidates for treatment with at least one medication.

Behavior problems can significantly affect an animal’s quality of life. Daily panic attacks contribute to chronic stress which can cause various sequelae including suppression of the immune system and muscle wasting. If the animal’s stress reaction is intense on a daily basis, a medication should be considered as a part of the treatment plan.

The assessment of risk to the patient is dependent on owner attitude toward the patient and the problem as well as the strength of the human animal bond. Because the signs of separation anxiety frequently include damage to the owner’s property and the injury to the pet, it is not uncommon for owners to approach their veterinarian about euthanasia. If the owner is considering euthanasia or if the pet is causing injury to herself, a medication should be considered for the patient.

Once the veterinarian determines that the patient’s behavior problem warrants the use of a medication, she must then decide if the patient needs a PRN medication or a daily administered medication. If the patient has a mild stress response, which lasts 2 hours or less, the owner is able to give the medication before the stress response is likely to start and there are no serious concurrent behavioral diagnoses, a PRN medication alone can be prescribed. If the patient is alone for long periods of time and there are other concurrent behavioral diagnoses, he will likely need a PRN medication and a daily administered medication.

Once the decision of whether or not to prescribe medication has been made, the veterinarian should prescribe behavior modification and management changes. The standard of care for veterinary behavioral medicine is to prescribe behavior modification for behavioral diseases. The medications which are FDA approved for separation anxiety are approved with behavior modification meaning that if they are dispensed without these recommendations, they are being dispensed off label.
There are many nutraceutical and supplement choices available to the veterinarian for relief of anxiety. While these products may not be as efficacious as a medication, they can be helpful in the treatment of patients where medication choices are restricted by medical disease. Melatonin and Rescue® Remedy (Nelsons) can be used on a PRN basis. Anxitane® (Virbac), Novifit® (Virbac), Harmonese™ (VPL) and Dog Appeasing Pheromone (DAP®) (CEVA) are best used daily. There are various products which may help anxious dogs such as the Storm Defender™ cape (Storm Defender), Anxiety Wrap® (Animals Plus), Thundershirt™ (Thundershirt) and Through A Dog’s Ear™ (Bioacoustic Research and Development). Of the products listed, only the Storm Defender™ cape (Storm Defender) has been studied. A placebo controlled study was done and the Storm Defender™ cape (Storm Defender) was shown to be no better than placebo. However, some clients report that their pets are helped by this product.

Medication options for PRN use include benzodiazepines, antihistamines and serotonin reuptake inhibitors. Regardless of the medication or supplement choice, when prescribing for PRN use, the medication or supplement should be administered before the dog gets anxious. If that is not possible, it should be administered as close to the onset as possible. Doses of commonly used medications are listed below:

- Diazepam (Valium®) - 0.5-2.2 mg/kg q 8-24
- Clonazepam (Klonopin®) - 0.1-0.5 mg/kg q 8-24
- Alprazolam (Xanax®) - 0.02-0.20 mg/kg q 6-24
- Hydroxyzine - 1.0-2.0 mg/kg q 8-24
- Trazodone - 2.0 mg/kg - 6.0 mg/kg q 8-24

As discussed above, some patients need a daily administered medication. When this is the case, owners should be informed that most of these medications take 2-6 weeks to take effect. As above, when any medication that changes mood is prescribed, owners should be aware of all side effects, but also that the mood of the pet can change in a negative way such as agitation and aggression. Because the medications below take so long to take effect, often a second medication has to be prescribed in order to hold the behavior at bay until the primary medication can begin to work.

- Fluoxetine (Reconcile®) - 0.5-2.0 mg/kg q24
- Sertraline (Zoloft®) - 1.0-3.0 mg/kg q24
- Clomipramine (Clomicalm®) - 2.0-3.0 mg/kg q12

The veterinarian can expect to get most cases of separation anxiety and/or storm phobia cases under good control in 3 months. These cases require chronic management, generally. Dogs with storm phobia alone can most likely be weaned off of medications after storm season. Dogs with storm phobia may not need a medication at all if the behavior modification is implemented. Expect to see storm phobia, separation anxiety and confinement anxiety together. Most cases need medication and behavior modification, management changes and long-term treatment for resolution.