PROTOCOL FOR UNDERSTANDING AND TREATING CANINE PANIC DISORDER

Overview of Panic Disorder

Canine panic disorder (PD) is characterized by a profound reaction to specific external or internal stimuli, and to some memory of these stimuli and how they made the dog feel. The stimuli could be visual, could involve a sound, taste or smell/odor, or could involve a pattern of social behaviors or signals. In some cases the dog appears to react only to a memory or perception of how a certain circumstance made her feel in the past. We cannot know what dogs "perceive," but we do know that dogs have excellent memories and the same brain architecture and function as do humans, so when we see behaviors consistent with true panic, even if the stimuli are not present, we need to consider that the memory of these stimuli, or the memory of the sensation that the stimuli may have caused, could be what is distressing the dog. One of the most problematic and recognized triggers for PD in dogs is entrapment, or its perception.

What Are the Signs of Panic Disorder?

The classic signs of PD are an extreme version of the signs seen in true phobias, including noise and storm phobia. Signs shown by the dog include intense avoidance of or attempts to escape from the situation that is distressing them. Specific and commonly seen signs are all associated with arousal of the sympathetic ("fight or flight") branch system of the autonomic nervous system (ANS) and may include:

- urination,
- defecation,
- vocalization,
- salivation,
- trembling/shaking,
- · increased and unfocused motor activity,
- · decreased motor activity or freezing,
- random destruction, and
- escape behaviors.

How Is Panic Disorder Different from a Phobia?

A trigger or focus of most phobias can be identified. This may not be true for PD. PD is triggered internally, and even when a trigger is identified, the *panic appears to be associated with the memory or perception of how some event caused the dog to feel, and it may not matter if the trigger is present.* Because PD is associated with memory or perception, avoidance of and withdrawal by the dog from the stimulus/trigger, as we see in fear and phobias, is just not possible. Our memories follow us.

Dogs with PD may be incapable of accepting any external information that could keep them safe or calm. The hallmark of PD is that these dogs have decreased sensitivity to pain and social stimuli, and so can do themselves great harm. These dogs experience these profound, non-graded, extreme responses in a way that is—externally—out of context to the environment or stimulus that provoked them.

If your dog has experienced one panic event, her risk of future events increases. This pattern is probably a result of what happens in a profoundly reactive region of the brain called the *amygdala*, where adaptive fear memories are quickly formed. When something goes wrong, the result is a dog with a *pathological response to the memory or perception of an experience* who panics under such circumstances.

What Else Should You Watch for?

PD is a classic example of a co-morbid condition. This means that it occurs with another anxiety-related condition. Only very rarely is a dog seen with PD and no other anxiety-related condition, but it can happen. PD is more commonly diagnosed in dogs who also suffer from fear, noise reactivity or phobia, separation anxiety, generalized anxiety disorder (GAD), and/or obsessive-compulsive disorder (OCD).



Random destruction in a pantry that occurred during a panicky event when a dog was left alone. None of the food was eaten; severely distressed individuals cannot eat.

PD may be the result of "entrapment" that is real or imagined. Dogs who are crated can panic because they cannot "escape."

- It is not surprising that a dog who may have been entrapped in a crate during a fire in the house could panic when crated. Everyone would consider that response to be normal.
- Most dogs who exhibit PD when crated, gated, kenneled, or otherwise enclosed, have *not* experienced anything external that is awful or threatening. For the vast majority of dogs who experience PD when confined, nothing happened to them in their crate, *except* that they could not leave.

These dogs cannot be confined because to do so would be to force them to experience PD. These dogs have been known to kill themselves in the process of trying to escape whatever confined them.



A dog who panicked when kenneled. She urinated, broke her claws (see blood on wall), and crashed into and spilled her food (B). Notice that she was still panting when the photo was taken (A).

Do Dogs Suffer from Posttraumatic Stress Disorder and Could Canine Posttraumatic Stress Disorder Be a Special Case of Panic Disorder?

The answer to this question is "maybe." Canine posttraumatic stress disorder (C-PTSD) is best described as a profound, nongraded, extreme response manifested as intense avoidance, escape, or anxiety, and associated with the sympathetic branch of the ANS in response to exposure to an identifiable, untenable (from the patient's perspective) stimulus or situation that the individual was unable to avoid or from which escape was impossible when these behavioral and physical signs were first felt. *Confirming behaviors can include mania or catatonia concomitant with decreased sensitivity/responsiveness to pain or social*



Dog panicking and biting at crate.

stimuli. Once the response is established, repeated exposure to any aspect of the original circumstance that triggered the original response, or that triggers a memory of the original response, results in an invariant pattern characteristic for that patient.

For a diagnosis of PTSD to be made, the response must be characteristic, the triggering event must be known and truly and profoundly traumatic or associated with some aspect of the trauma (and this could be an odor), and the response must only occur in a circumstance where some aspect of the triggering event is perceived by the dog.

In most pet dogs these criteria are difficult, but not impossible, to meet. A number of military dogs have met the criteria for this diagnosis, as have some pet dogs.

How Can We Treat Panic Disorder?

PD is a serious and debilitating behavioral condition that must be treated as soon as it is noticed. Anyone who uses a crate, gate, or kennel should inspect it daily for any signs that the dog may have tried to escape. If the dog was simply trying to leave, most of the damage may be concentrated around the locking mechanism. If the dog panicked, the damage is not so focused and rational.

If you are not sure whether your dog is panicking, videotape her when she is engaging in the behavior you think is a concern. Most modern video cameras are small and can easily record long videos in the event that you are not home when the dog may be panicking. If you show the video to your veterinarian, you will have provided extremely helpful information that will help with the design of a good treatment program.

If your dog panics when enclosed, treatment must involve finding a way to contain her safely without triggering the PD. For dogs who react to crates or runs, a larger crate or run will not suffice. Because so much of this condition is about how the dog "perceives" her world, you will get your best information about what distresses your dog by watching her. In some cases, day boarding or doggie daycare may be the best option.

Teaching the dog to begin to relax as soon as she feels the onset of a bout of panic is key to successful treatment. It is unlikely that you will be able to attain this goal without medication.

Depending on your dog's overall arousal level, how easily the PD is triggered, your ability to recognize and intervene before the trigger provokes the PD and whether other co-morbid conditions are involved, your dog will also need a daily medication, usually a selective serotonin reuptake inhibitor (SSRI) or a medication in a related class. For successful treatment to occur, we need to be able to:

- recognize and prevent the reaction to the trigger, even if it is internal,
- abort any panic attack that occurs, and
- raise the dog's threshold for reaction.

This three-part strategy generally requires the use of medication on both a daily and as-needed basis.

Medications that are most effective in breaking through and preventing the panicky events that characterize PD include:

- alprazolam, the panicolytic benzodiazepine (see the Generalized Guidelines for Using Alprazolam for Noise and Storm Phobias, Panic, and Severe Distress),
- other benzodiazepines, including clonazepam, for dogs who do not respond well to alprazolam,
- gabapentin, a compound that looks like the inhibitory transmitter, gamma-aminobutyric acid (GABA), but which is not active, and

• medications that affect central control of heart rate, like clonidine.

For more information on these and other medications please see the **Protocol for Using Behavioral Medication Successfully**.

Medication will allow you to help your dog attain a level of normalcy or calm that will permit her to learn to become more relaxed. This is the first step in learning to not react to her triggers, whether they are external or internal.

Your dog should start to work with the three foundation behavior modification protocols as soon as possible: the **Protocol for Deference**, the **Protocol for Teaching Your Dog to Take a Deep Breath and Use Other Biofeedback Methods as Part of Relaxation**, and the **Protocol for Relaxation**: **Behavior Modification Tier 1**. For some dogs, "as soon as possible" will be immediately, but for other dogs some response to medication will first be needed so that the dog is sufficiently calm to effectively learn new behaviors. One of the advantages of the newer behavioral medications is that *they actually speed the rate at which dogs acquire new behaviors through behavior modification*. Dogs affected with PD suffer so much that this is very good news.