

## GENERALIZED GUIDELINES FOR USING ALPRAZOLAM FOR NOISE AND STORM PHOBIAS, PANIC, AND SEVERE DISTRESS

### Dosages and Dosing

The recommended dose of alprazolam for dogs is 0.25 to 0.5 mg every 12 hours, routinely, or every 4 to 6 hours, as needed. The published dosages for dogs are extremely variable, but preferred starting range is 0.02 to 0.04 mg/kg. For most dogs this means starting with a dose of 0.25 to 0.5 mg. Alprazolam is sold in 0.25, 0.5, 1.0, and 2.0 mg tablets.

The recommended dose of alprazolam for cats is 0.0675 to 0.125 mg ( $\frac{1}{4}$  to  $\frac{1}{2}$  of the smallest tablet made) every 12 to 24 hours as needed. The published dosage for cats is 0.0125 to 0.025 mg/kg, which means that for most cats the initial dose will be  $\frac{1}{8}$  to  $\frac{1}{4}$  of a 0.25-mg tablet.

All of the examples used in this handout pertain to dogs, but the pattern for use is similar for cats. *Because the medication discussed is a controlled substance and because we need to ensure that your dog or cat is healthy enough to try this medication, please use this handout in consultation with your veterinarian and make sure you understand dosing schedules and amounts.*

### Three Ways to Use Alprazolam

Alprazolam is the “panicolytic” medication used in dogs and humans, and used well, it can be a godsend. There are three ways to use this:

- as a true preventative for dogs with known triggers for profound distress (e.g., storms),
  - as a situational and interventional medication for distressed animals in known situations to help them not to consolidate memory about the situation and to help them in the future not to get to the level of reactivity where learning to be more fearful is a concern (e.g., your dog becomes badly scared by dogs in the park and can not enjoy the rest of her walk; the dog worries and cries when she goes to the vet), and
  - in a truly panicolytic context (e.g., the storm crept up on you and now your dog is curled in a ball, drooling).
- All of these can be rational uses within the same patient.

#### Preventative

To use alprazolam as true preventative you must be able to anticipate when there will be a provocative stimulus: a guest, the later walk in the day, a departure to go to work, a scheduled visit to the veterinarian, a known or constant pattern of storms, et cetera. With online use of Doppler radar, people can become excellent at predicting storms to which their dogs and cats might react.

The starting dose of alprazolam for most dogs is 0.25 to 0.5 mg. One choice is to give a 0.25-mg tablet 1.5 to 2 hours before anticipated event. Then repeat a full (0.25 mg in this example) or half dose (0.125 mg) 30 minutes before the event. Repeat every 4 to 6 hours as needed using either the half or full dose. Start with the half dose, as this dosing—as explained—is cumulative. If the stimulus is going to present for consecutive days (e.g., a series of storms, a house guest) you may find that giving the medication every 12 hours plus using is as needed works well. All patients are different in their responses and for clients to use this medication well they have to be willing to adjust it and watch the dog.

#### Situational/Interventional for Dogs with Known and Worsening Fears and Anxieties

If you find that your dog, who is already known to be fearful in certain circumstances, is reacting to some stimulus (a surprise storm, distress at discovering she is alone, meeting a scary dog or person on the street) **and she cannot return to her baseline of calm behavior within 5 minutes of you attempting to calm her** (and you should be fairly passive and just talk calmly to her), our concern is that such events will teach her to be more fearful. Every time dogs practice fear they learn to do it better and can react more quickly. So, if the dog becomes upset by the approach of a new dog in the park and is still distressed even when the dog goes away, give her a half or a whole dose at that time.

If your dog becomes distressed outside on a walk—and for dogs who also react to noise, the distress may have been triggered by a noise—you can continue or discontinue the walk, depending on her response, but you really want the dog to **not** make molecular memory of her fear and response to it, so please consider giving her the alprazolam because it interferes with consolidation or processing of memories associated with fear.

There is a fine line between whether the dog really needs the medication to stop the response or whether you can simply intervene early enough to avoid the distress that will make a molecular memory. No one is perfect at intuiting their dog's needs, so your best gauge is your dog's behaviors. If you are going to use alprazolam as an interventional, you will need to have some with you at all times or give it before you engage in the activity that may provoke the dog.

- If you know the behaviors your dog exhibits when concerned (panting, pacing, salivating, hiding, cringing, crying, et cetera) you can monitor them and medicate the dog beforehand when you think they might appear.
- If you keep a written log of your dog's behaviors and the circumstances under which they appear, this will help you to monitor the dog's behavior.

Such attention means that, in most cases, she will get the medication at the time that it will best help her.

Obviously you can do a combination of the above if you have an upsetting set of days. You could give the dog a full dose as soon as you awaken, top it off 2 hours and then again at 30 minutes before the expected event using a half dose, and continue to give a half or a full dose as needed depending on upset. *Always start as with the lowest effective dose.* If we can medicate the dog before she has any upset you will need less medication.

#### Panicolytic

If something happens that is truly bad and the dog has a full-blown panic attack, give the full dose immediately. If she is still distressed 30 minutes later, repeat with a half or a whole dose. Remember, the pill can be dissolved in a tiny amount of liquid or will dissolve in the dog's cheeks.

### Finding the Right Dose

You may have to try different dosages to find the best dose for your dog. Alprazolam is a benzodiazepine and so can

have a tremendously variable effect depending on the individual. Your first check needs to be for serious side effects. This can include serious sedation or paradoxical excitement. We do not want dogs so sleepy that they fall down the stairs or drown in their water dish, or so excited that they run through a glass door. We want to learn whether or not your dog can benefit from this medication while experiencing as few side effects as possible.

- *Checking for sedation:* When you are going to be home with the dog for at least 4 hours, give the dog at least 0.25 mg. If he is so sedated he cannot function or walk easily up and down stairs, or if he is uncoordinated (ataxic), this dose is too high for him. Halve it. If he is still sedated, we need to find another medication.
- *Checking for excitement:* When you are going to be home with the dog for at least 4 hours, give the dog at least 0.25 mg. If he starts to pant, run around, lack focus, seem wild-eyed, frantic, scared, or otherwise agitated, protect him and let the medication wear off. If you wish to try again, halve the dose. If he is still agitated, we need to find another medication.
- *The desired response when nothing is happening and you are home:* When you are going to be home with the dog, give the dog at least 0.25 mg. If there are no provocative stimuli (no scary noises or people, no upset in the household) the dog should just seem his normal self. He may sleep a bit and more deeply, but he should awaken upon request and not seem at all sedated or “drugged.” In other words, you should not be able to tell he was given medication. The dog may be hungrier than on days when the medication was not given. Now we need to learn if we can find a dose that will help.
  - For a week, you can try the baseline dose.
  - If there is no effect after that, you can try doubling it.
  - After another week you can double the dose again.
  - If you are getting 2 to 4 mg into the dog and there is no effect, it’s unlikely that the dog will respond to this medication. He may, however, respond to other benzodiazepines, alone or in combination with tricyclic antidepressants and selective serotonin reuptake inhibitors, or medications like gabapentin or clonidine. If you are

going to try another benzodiazepine, you can work through the instructions above at a starting dose established for that particular benzodiazepine.

## Tips to Remember

- Please remember that all benzodiazepines are humanly abusable and should not be placed in some households. Ensure that you keep any benzodiazepines in a secure place. In fact, if your veterinarian has any concerns about substance abuse, another medication may be suggested.
- Please do not give your dog your medication. If you think the dog would benefit from alprazolam or any other medication, you *must* talk with your veterinarian.
- If the dog has been taking any benzodiazepine for more than a few days continuously, wean the dog from the medication rather than stopping abruptly, if you have a choice. In an emergency you can stop benzodiazepines abruptly, but the concern is the development of signs of withdrawal (e.g., more anxiety).
- Regular blood work (every 3 to 6 months) can monitor how your dog is metabolizing medications.
- Note that you can give this medication twice a day, or up to every 4 hours as needed, or some combination of both of these patterns.
- If your dog or cat is going to be taking any other medication that is metabolized by the liver or is undergoing anesthesia or sedation, remind your veterinarian that the dog is taking a benzodiazepine because interactions matter.
- If you are using any benzodiazepine to treat your cat, please remember that cats metabolize these medications and their active metabolites more slowly than do dogs.
- Dogs and cats taking benzodiazepines may be hungrier than normal and if they are less anxious they may burn fewer calories.
- Finally, please remember that use of medication is not a magical solution—we are using the medication to both help modulate the anxiety, but also because it will facilitate them learning to act in new and more rational ways. These medications work best when combined with behavior modification.