

GOING FOR A WALK – FEARFUL AND REACTIVE DOGS

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SCOPE OF THE PROBLEM

Aggression directed toward unfamiliar pets or people is predominantly caused by fear and anxiety. Aggression that is limited to, or more intense on the home territory may be linked to territorial aggression.

Aggression arises from the interplay of genetics and environment. The genetic predisposition to aggression to an owner or family dog has been shown to be distinct from aggression toward unfamiliar humans and dogs. In fact, aggression to strangers, unfamiliar dogs, familiar people, family pets and pain may have different underlying mechanisms.^{1,2} Breed related behaviors, genetic differences between field and show lines, and inherent predisposition to fearfulness, impulsivity and reactivity may all contribute.³ Both early development and experience play a pivotal role. Puppies separated from the dam at 30-40 days compared to dogs adopted at 8 weeks were more fearful on walks and more reactive.⁴ Dogs restricted from seeing other dogs during their first 8 weeks were more likely to be aggressive to other dogs.⁵ Aggression to unfamiliar people is greater in dogs raised in non-domestic environments or that lack exposure to urban environments from 3 to 6 months.⁶ Reward based, force free training, attending puppy classes and socialization during the sensitive period, lowers the risk of aggression to unfamiliar people and fear of dogs outside the home, and improves trainability, while dogs trained with confrontation and punishment are more likely to display avoidance and aggression toward unfamiliar people and dogs.^{5,7,8} The use of pheromones in newly adopted puppies and during puppy classes may improve sociability and reduce fear and anxiety to new people and situations.^{9,10} Behavior counseling at the first puppy visit may reduce the development of fear of unfamiliar people, housesoiling, mounting, and mouthing of people.¹¹ Conversely early negative social experiences may increase the risk of aggression.^{5,7,8} Aggression may be more frequent in dogs on property or confined, and twice more likely on leash.¹²

DIAGNOSIS

Aggression to unfamiliar people or dogs may be a normal response to unfamiliarity, visitors on the territory, or a result of previous unpleasant experience, or it may be behaviorally abnormal (reactivity, impulsivity, intensity). The behavior may begin as unruly or exuberant behavior; however, owner responses including leash corrections and verbal or physical punishment may increase fear, anxiety and arousal and condition further negative associations with the stimulus. Underlying medical problems that might cause or contribute to the signs must first be ruled out including neurologic disease, endocrine disorders, metabolic diseases, and pain.

PROGNOSIS

Prognosis is about whether triggers can be identified, the risk can be safely managed, the level to which improvement can be practically achieved with behavior modification and medication and whether the owners understand and accept the limitations of the pet and household. If safety cannot be insured the pet should be removed from the home. In one study, 76% of dogs that were aggressive toward unfamiliar dogs could be around other dogs on leash after treatment.¹⁵

MANAGING, MODIFYING, MEDICATING AND MONITORING

1. Management

Management is the essential first step to prevent recurrence, insure safety, address the pet's welfare, and prevent further learning, vigilance and anxiety. While punishment or confrontation might suppress the behavior, it will cause further fear of the stimulus and potentially the owner. In addition, each time the stimulus retreats or the pet is removed from the situation the behavior is negatively reinforced. Prevention allows the pet to calm, return to

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baseline, prevent recurrence of fear, anxiety and stress, and provides the opportunity for reward-based training to be effectively implemented in an environment in which the pet can succeed and learn. In addition, if drug therapy is indicated it should be administered to effect before exposure training is implemented.

- a) Identify each situation in which the problem might arise and all stimuli that might trigger the behavior. Prevent further exposure by avoiding locations and situations in which problems might arise, avoiding actions and interactions that might trigger the behavior, and identifying and staying below the threshold (limits) at which the pet may react.
- b) Owners must learn to read and recognize canine communication to identify the earliest signs of fear and anxiety as well signs that the pet is calm to be able to train and shape increasingly more relaxed responses. Most owners can recognize overt signs of fear and anxiety but not early or subtle signs.
- c) Products that might aid in shaping desirable behavior, reorienting the dog into desirable outcomes, preventing access to stimuli and increased safety include head halters, front attachment harnesses, basket muzzles, and products that might reduce the sights and sounds of stimuli. Pets should be positively conditioned to each new management product.
- d) Avoid walks or housing the pet outdoors except at times and in places where fear evoking stimuli can be avoided. Alternately keep the dog securely controlled on leash at a threshold at which the dog can remain calm and take treats or toys.
- e) Exposure to visual and auditory stimuli might be minimized by preventing access, by keeping the pet away from doors and windows, using eye or ear covers or sound muting. Providing enjoyable alternative activities can keep the pet occupied and focused away from stimuli.

2. Modifying Behavior

Behavior should be modified by rewarding and shaping what is desirable and preventing undesirable. Punishment and negative outcomes must be avoided. Begin training in environments with a minimum of distractions in which the pet can focus and learn, using the most motivating rewards to train and positively condition. The goal is to condition positive associations and train desirable outcomes. Training under the guidance of a force free / reward trainer can assist owners to identify signs and achieve training goals.

Activation of the HPA axis, catecholamine release and the resulting physiologic and emotional effects prevent conscious learning and decision making. To achieve the calmest baseline for training and learning a) train at a time and in a place where pet is calmest b) identify and stay below the threshold at which fear and anxiety arise c) use the most motivating rewards to reinforce, condition and maintain focus d) use management products that might calm, mute stimuli, and maintain focus and e) use medication if indicated for ongoing and / or situational use.

a) Foundation training

Teach the pet behaviors that will serve as a foundation for further improvement i.e. to replace the current response with a behavior that is desirable (differential reinforcement of an alternative behavior, response substitution) or to calmly remove the pet from the situation. The goal is to train each behavior on a cue that is immediate, consistent, and reliable in a variety of environments and with multiple distractions. Clicker and target training are particularly useful for reinforcement training.

- i) Train behaviors that get and maintain the pet's attention such as watch, focus, or hand target
- ii) Train behaviors that can effectively move the pet through the situation or away from the stimulus such as loose leash walk, back up, find it, let's go (180° turn away)

b) Graduated exposure

- i) Once training is reliable and immediate in multiple environments with multiple distractions, gradually proceed to a stimulus level where the dog will orient to (notice) but is below the threshold for fear. Make positive associations by pairing favored rewards and to teach (train) desirable alternative behaviors to get the pet to focus reliably remove the dog from the

situation. With counterconditioning the pet is rewarded with each successful exposure with the goal of making positive associations with the stimulus regardless of the behavior. With operant conditioning the pet is taught to engage in an alternative desirable behavior for rewards, with the goal of teaching the pet to exhibit the behavior whenever it sees the stimulus.

ii) Desensitization and counterconditioning - Identify the threshold at which the fear, anxiety, or aggression might be triggered considering environment, stimulus characteristics, movement, distance, or volume. Develop a stimulus exposure gradient to start below threshold and reward repeatedly or continuously with each exposure to the stimulus. Gradually increase the intensity of the stimulus (movement, proximity, variety, environment), while pairing with rewards. If there are any signs of fear or anxiety then the stimulus intensity must be reduced for the next exposure.

iii) Establish a gradient of rewards so that the most motivating can be repeatedly or continuously paired with each stimulus exposure. If the pet stops taking or focusing on rewards, the stimulus intensity is too great, or the rewards are not sufficiently motivating.

3. Medication

Psychotropic drugs, can be used for reducing the signs associated phobic, panic, fear, anxiety, reactivity, and impulsivity and to improve trainability. Natural supplements, functional foods and pheromones might be used concurrently. However, medication does not change the association with the stimulus so that concurrent behavior modification is needed to teach appropriate behavioral responses and countercondition to the stimulus. Generally, SSRI's such as fluoxetine, paroxetine, or fluvoxamine at 1-2 mg/kg daily or sertraline or a tricyclic antidepressant such as clomipramine at 1-2 mg/kg twice daily would be the drugs of choice to reduce or improve fear, reactivity, impulsivity, and intensity of behavior. Since SSRI's and TCA's require a month or more to achieve effect, medication might also need to be dispensed to manage situations, facilitate training and behavior modification, and prevent further progress. More immediate acting medications (e.g. trazodone, clonidine, benzodiazepines, dexmedetomidine oro-mucosal gel, imepitoin) might be used on a short term or situational basis. In some cases, clonidine, trazodone, benzodiazepines, imepitoin, or gabapentin might be used as adjunctive therapy for better control reactivity and impulsivity.

4. Monitoring

Ongoing monitoring and follow-up is essential to review progress, get feedback, and provide support to make modifications, additions or changes to the behavior program and medication based on outcomes. Follow-up visits or phone calls should be scheduled beginning within 4-6 weeks to review progress.

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