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## **Dominance aggression in dogs: Part 1**

A lack of understanding about the nature of canine dominance aggression has led many owners to try to deal with this behavior disorder by using physical punishment-teaching the dog who is boss. Today, fortunately, a tide of trainers and behaviorists are replacing this outdated, ineffective approach with humane and scientific treatment methods.

This two-part symposium describes these treatment methods as well as the disorder's diagnosis. In Part 1, I discuss the roots of canine dominance aggression, the terminology used to describe it, and the first steps in its treatment: avoidance and passive behavior modification. Next month in Part 2, I'll describe active behavior modification, which follows passive behavior modification, and drug therapy. I've also included client information handouts that tell pet owners exactly how to handle this behavior problem.

These articles will help veterinarians recognize canine dominance aggression and teach their clients humane and effective treatment techniques.

*Dr. Karen L. Overall*

### **Understanding and treating canine dominance aggression: An overview**

This potentially dangerous behavior disorder is rooted in a struggle for control. But if we understand the nature of this problem and treat it appropriately, everyone wins.

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DOMINANCE, or dominance-related, aggression is one of the most common forms of canine aggression. It is manifested by consistent atypical, out-of-context aggressive behaviors directed toward people. These behaviors include growling, snapping, and biting. Bites are usually not preceded by a vocal warning.'

Dogs display dominance aggression in a variety of circumstances. What links these events is a dog's attempt to control situations involving people. Typical provocative situations include:

- Disturbing a dog while it is sleeping
- Pulling a dog's leash to correct it
- Reaching over a dog's head to attach a leash
- Grooming a dog
- Staring at a dog
- Hugging a dog
- Handling a dog's muzzle or face

- Conducting restraint exercises
- Administering physical punishment.

Targets of the aggression may include one or more family members, or a dog may be aggressive to strangers only. Some dogs are aggressive only during a household commotion that distresses them. Not all household members may be equally victimized by dominantly aggressive dogs. Some dogs react aggressively toward young children because children are at the same eye level as the dogs and their staring is perceived as a threat. A more compliant family member may be victimized more often than someone who is firm with the dog because the dog knows it can push around a compliant person. Conversely, some dominantly aggressive dogs know they can victimize compliant people so they leave them alone and challenge the more forceful family members instead.

Canine dominance aggression typically develops at social maturity, which usually occurs between 18 and 36 months of age. Although most dominantly aggressive dogs are male, this condition can occur in females, often at a young age (8 weeks to 8 months). Dominance aggression is not controlled by hormones, but the presence of androgens, including testosterone, or the lack of estrogen during sexual and social development may exacerbate the aggression. The fact that dominance aggression usually occurs at social maturity suggests that owners don't cause this problem.

## **Diagnosis**

Before making a diagnosis of dominance aggression, rule out any medical causes of aggressive behavior. Some medical conditions (*e.g.* neoplastic, infectious, or neurologic disease) and their treatments can cause dogs to be more reactive and to behave inappropriately. 2

Once medical causes have been ruled out, a diagnosis of dominance aggression is based on the recurring presence of the atypical aggressive behaviors described above. A definitive diagnosis can be made if an aggressive response intensifies when a dog is physically or verbally corrected or its behavior is interrupted.3

Dominance aggression is not linked to one specific circumstance, and its diagnosis should not be based on a one-time event. For example, a diagnosis should not be made if a dog bites only when pushed from a bed; the dog may have been frightened or hurt. But a diagnosis can be made if a dog bites when pushed from the bed and also exhibits other aggressive behaviors (*e.g.* it growls when the owner reaches over its head to place a leash, yells at it, or disturbs it while sleeping). These behaviors stem from the dog's urge to control rather than from a specific activity.

Dominance aggression is not specifically linked to food-related, possessive (toys), or territorial aggression, but it can occur concurrently with these disorders. If so, the situation may be severe."

The frequency and intensity of aggressive behaviors do not affect the diagnosis. But these factors may affect the prognosis and the dog's potential danger to people.

## **Dominance vs. assertiveness**

In diagnosing dominance aggression, remember that the term *dominance* is often used erroneously. Use the term only when describing an individual's ability to maintain or regulate access to some resource in a staged contest.6-8 The word *dominant* should not be used to describe a dog that is merely assertive, confident, or pushy. A dog can be pushy or assertive without being dominantly aggressive; such a dog can "talk back" and

snort at people, but it isn't aggressive in the situations discussed above. Pushiness or assertiveness is a personality type. In fact, many owners prefer confident dogs because they work well in obedience situations and are thought to have good personalities. Because the terms *dominance* and *dominance aggression* are often used erroneously, I ask owners to avoid using these loaded terms and instead describe what their dogs are actually doing.

### **The two categories of dominantly aggressive dogs**

Because it is associated with social contexts, dominance aggression, like other forms of aggression, is probably an anxiety disorder. Dogs with dominance aggression can be divided into two broad groups: 1) those that know they are in control and can compel their owners to do their bidding, and 2) those that are unsure of their social roles and use aggressive behavior to discover what's expected of them.

Contrary to the commonly held view of dominance aggression, dogs in the first group are rare. Most dominantly aggressive dogs are in the second group. These dogs receive information about their social and behavioral boundaries based on how their owners react to their aggression. This is analogous to disruptive and sometimes aggressive teen-age children with behavior problems. Dogs in this category appear to be less sure of their relative hierarchical status. They express more ambiguity in their vocal and physical responses to what they perceive as threats. Dogs in the second group do not direct aggression equally toward all people because they respond differently to each social interaction.

According to data obtained at the Behavior Clinic at the University of Pennsylvania's Veterinary Hospital, most dogs in the second group also exhibit attention-getting behavior (Behavior Clinic, Veterinary Hospital, University of Pennsylvania: Unpublished data, 1999). These dogs are needy and are constantly setting people up to attend and defer to them. They have an abnormal urge to control and often challenge others to determine their roles in the social environment. Dogs in the second group respond extremely well to anxiolytics (*e.g.* tricyclic antidepressants and selective serotonin reuptake inhibitors). These drugs facilitate the behavior modification techniques that are designed to provide dogs with a kind, humane rule structure.

Because affected dogs have an anxiety disorder and are using provocative behaviors to get information, physical punishment has no place in teaching appropriate behavior. Physical punishment removes uncertainty and convinces these dogs that the person punishing them is a threat. Accordingly, their aggression worsens. Hitting, beating, or kneeling an affected dog creates an adversarial relationship and reveals a lack of understanding about canine aggression and anxiety.

### **Recognizing subtle dominance aggression behavior**

Much has been written about dogs seeing people as part of their pack. This simplifies the situation. It is more likely that dogs and people can live together successfully because dogs and people have similar social systems. Dogs live in extended family groups, have extended parental care, and use vocal and nonvocal communication. More important, dogs and people both have social systems based on deference, not physical violence and control. Many people think that dogs constantly fight for control and status. On the contrary, studies of wolf and wild dog behavior indicate that aggression and violence are the exception. There is a relative hierarchy of social rule structure, and status can be affected by the age and sex composition of the social group and by an individual's skills.

Because dogs and people have similar social structures, we recognize many canine signals. Unfortunately, this similarity is also a problem because people assume that dogs' signals are exactly like ours. For example, some

owners think that a dog is giving them a hug when the dog places its paws on the owner's shoulders. This is not a hug, it is a challenge. In communication between dogs, pressing on another with the front feet is a clear challenge. By petting dogs that are actually challenging them, owners inadvertently defer to the abnormal dogs. This petting can worsen the dogs' behavior.

Many affected dogs exhibit subtle dominantly aggressive behaviors that cause clients to redirect their activities. For example, an affected dog will lie in front of a door or furniture so that its owner has to avoid the area, or it may lean against or have a paw resting on the owner at every opportunity. Owners need to distinguish these behaviors from mere pushiness or attention-seeking. For example, if a dog is leaning against its owner just to get attention, the owner can physically move the dog without its becoming aggressive. Unlike most dominantly aggressive dogs, dogs that lean on a person for attention do not stiffen, open their eyes, and move with the person so they are again touching or pressing. Dogs seeking closeness usually respond to verbal cues to stop leaning and then use solicitous behavior (*e.g.* turning their heads sideways, rolling over, whining, wagging their tails, putting their ears loosely back). Dominantly aggressive dogs may stiffen and "talk back" by grumbling or growling. Later, the growling may get deeper in pitch, and the dog's stance, vocalization, or actions (*e.g.* biting) may become more threatening. In such cases, caution is urged.

### **Treating canine dominance aggression**

The goal of treating dominance aggression is to improve an affected dog's behavior so that the family can happily and safely live with the dog. Treatment should minimize the risk of injury to people who associate with the dog and the risk of injury to the dog itself. Of course, treatment should be humane.

Treatment involves the following steps:

- Avoidance of all circumstances known to provoke an affected dog (*e.g.* if the dog reacts when hugged, don't hug the dog; if the dog reacts when sleeping on the bed, don't let the dog sleep on the bed).
- Passive behavior modification to encourage dogs to defer to their owners. Passive behavior modification also ensures that undesirable behaviors aren't rewarded (*e.g.* if the dog stares at you, walk away; if the dog won't let you put on a leash or collar and instead rolls over and tucks in its neck and jaw, walk away); the key here is to prevent a struggle over control and decrease the dog's reactivity in the situation. Passive behavior modification also involves spontaneously praising or rewarding a dog whenever it exhibits a desirable behavior.
- Active behavior modification in the form of desensitization and counterconditioning to teach the dog a new, less aggressive way to react in the situations it regards as provocative
- Antianxiety medications, if necessary.

The next article in this symposium focuses on the first steps in treating canine dominance aggression: avoidance and passive behavior modification.

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