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## **AGGRESSION: DIAGNOSING AND TREATING AGGRESSIVE BEHAVIORS IN DOGS**

Aggression is the most serious and dangerous behavior problem that dog owners may need to deal with. Since there are many different types of aggression, making a diagnosis, determining the prognosis (the chances of safe and effective correction) and developing an appropriate treatment plan are usually best handled with a veterinary or applied animal behaviorist. In some cases medical conditions can contribute to aggression, therefore before a behavior consultation it is essential that your dog have a complete physical examination and a set of blood tests to rule out organ dysfunction. In order to treat the problem effectively, it will first be necessary to determine which type of aggression your dog displays: dominance related, fear, possessive, protective and territorial, parental, play, redirected, pain induced, pathophysiological or medical and learned. In many cases more than one form of aggression may be exhibited.

### ***What is dominance aggression and how is it diagnosed?***

One of the most common types of aggression seen by veterinary behaviorists is dominance-related aggression. In order to achieve security and cohesiveness within a group or pack, a hierarchy develops. Once a dog develops a position of leadership with a family member (or other dog), any challenge to that dog's leadership may lead to aggression. Dogs use facial expressions and body postures as signals to display dominance, such as standing tall, a high wagging tail, eye contact, or snarling. Aggression towards family members in one or more of the following circumstances along with dominant signaling may indicate dominance aggression:

- A. Protecting resting areas or resources (food, toys)
- B. Restraint, pulling, pushing, discipline, punishment
- C. Staring, eye contact
- D. Handling by the owner (lifting, petting, hugging, rolling over onto back or side)
- E. Overprotection of a family member

### ***What is fear aggression and how is it diagnosed?***

Fear aggression arises when a dog is exposed to people or other animals that the dog is unfamiliar with or those that have been previously associated with an unpleasant or fearful experience. Although some dogs may retreat when fearful, those that are on their own territory and those that are prevented from retreating because they are cornered or restrained, are more likely to fight. If the person or animal retreats, acts overly fearful or the pet is harmed or further frightened in any way (e.g. a fight, punishment), the fear is likely to be further aggravated. Fear aggression toward family members might arise out of punishment or some other unpleasant experience associated with the owners. Many cases of fear aggression are seen as combinations or complicating factors of other forms of aggression (dominance, maternal, possessive, etc.). Fearful body postures in conjunction with aggression are diagnostic of fear aggression. Behavior therapy, perhaps in combination with drug therapy can be used to treat most cases of fear aggression.

Play aggression is commonly seen in young dogs toward people or other pets in the family. Overly rambunctious play along with grabbing, nipping or biting of people or their clothing are some of the common signs of play aggression. Although it is a normal behavior, it can lead to injuries and, if handled incorrectly could lead to more serious forms of aggression as your dog matures.

### ***What is possessive aggression and how is it treated?***

Possessive aggression may be directed to humans or other pets that approach the dog when it is in possession of something that is highly desirable such as a favorite chew toy, food, or treat. While protecting possessions may be necessary if an animal is to survive and thrive in the wild, it is unacceptable when directed toward people or other pets in a household. What can be confusing for some owners is that it is not always food that brings out the most protective displays. Novel and highly desirable objects such as a tissue that has been stolen from a garbage can, a favored toy, human food, or a piece of rawhide are some of the items that dogs may aggressively protect.

Treatment must first be directed at preventing possible injury. At first it may be best to confine your dog so that it cannot gain access to any items that it might pick up and protect. Dogs that protect their food can be given a less palatable diet, and fed in a separate room away from family members. Dogs that protect their treats or toys should have them taken away, and only allowed access to them when alone in the crate or confinement room. When you are available to supervise, a long leash and head collar can be kept attached so that your dog can be prevented from wandering off and immediately interrupted if it attempts to raid a garbage can or pick up inappropriate objects. Booby traps (shock mats, Snappy Trainers, motion detectors, unpleasant tastes) can also be used to teach your dog to stay away from selected objects. Although prevention can help to ensure safety, if the problem is to be corrected your dog will need to be taught to accept approaches and give up objects on command. The goal is to train the dog that it will receive a favored treat or reward that is even more appealing than the object in its possession. The key to success is to have good control and a well-trained dog. If your dog will not sit and stay, come, or allow approach when it has no object in its possession, then there is little chance of correcting a possessive problem.

### ***What is territorial aggression and how can it be treated?***

Protective aggression may be exhibited toward people or other animals that approach the pet's property (territorial aggression). Generally people and other animals that are least familiar to the dog, or most unlike the members of the household are the most likely "targets" of territorial aggression. While most forms of territorial aggression are likely to occur on the property, some dogs may protect family members regardless of the location. Territorial aggression can be prevented or minimized with early socialization and good control. Young dogs should be taught to sit and receive a reward as each new person comes to the door. To reduce potential fear and anxiety toward visitors, you should ensure that a wide variety of visitors come over to visit the puppy, while the puppy is young and sociable. In time, most dogs will begin to alert the family by barking when strangers come to the home. However the dog that has been well socialized and under good control can be trained to quickly settle down and relax. For dogs exhibiting territorial aggression, you will need to gain enough control to have your dog sit, stay and when calmed down, take a reward at the front door. Generally a leash and head collar will give the fastest and most effective control. Using a desensitization and counter-conditioning program you can begin retraining with low levels of stimuli (such as people arriving in a car, walking past the front of the house, or perhaps even a family member knocking on the door or ringing the bell). The idea is that each time someone arrives at the house or rings the bell, the dog will come to expect a favored reward (toy, cheese, hot dog slice or play session) as soon as it stops barking. Once the dog can be controlled and receives rewards in this environment, gradually more intense stimuli can be used. Sometimes, an anti-bark collar, shake can, or air horn, can be used to disrupt the initial barking, so that the pet can be directed to perform the appropriate behavior and get its reward.

### ***What is predatory aggression and how can it be treated?***

Predation is the instinctive desire to chase and hunt prey. Predatory behaviors include stalking, chasing, attacking, and ingestion of prey animals, but may occasionally be directed at people or other pets. Some dogs that have never shown chase or predation, may display the behavior when running together with a group of dogs. Although the desire to chase can be reduced by using a head collar and desensitizing and counter-conditioning in the presence of passing stimuli, this is a very dangerous form of aggression which must be prevented. Whenever the dog is outdoors it should be confined to an escape proof pen or run, or controlled securely by the owners. A leash and head collar or a leash and muzzle, can help to ensure safety when out for walks.

***What is pain-induced aggression and how can it be treated?***

Pain-induced aggression is usually elicited by some form of handling or contact that elicits pain or discomfort. However, even if your dog is not exhibiting pain, certain medical conditions (endocrine imbalances, organ disease, etc.) may make the pet more irritable and perhaps more prone to aggression. Fear and anxiety further compound many of these cases. Once your dog learns that aggression is successful at removing the stimulus, aggression may recur when similar situations arise in the future, whether or not the pain is still present. Treatment first requires that the medical or painful condition is resolved. Next, you will need to identify the types of handling and situations that have led to aggression in the past. With desensitization and counterconditioning, your dog can slowly and gradually be accustomed to accept and enjoy these situations. Once the dog learns that there is no more discomfort associated with the handling, but that there may be rewards, the problem should be resolved. A muzzle or leash and head collar, may be the safest way to begin the retraining.

***What is maternal aggression and how can it be treated?***

Maternal aggression is directed toward people or other animals that approach the bitch with her puppies. When bitches go through pseudopregnancy they may also become aggressive and begin to protect nesting areas or stuffed toys at the approximate time when the puppies would have been born. Once the puppies are weaned and the dog is spayed the problem is unlikely to recur. In the interim, the owners can use a leash or leash and head collar, along with the come command and rewards to teach the dog to leave the litter, at which time the puppies can then be handled. With desensitization, counterconditioning, good control and highly motivating rewards, it may be possible to train your dog to accept approach and handling of the puppies.

***What is redirected aggression and how can it be treated?***

Aggression that is directed toward a person or pet that did not initially evoke the aggression is classified as redirected. This is likely to occur when the dog is aroused and a person or other pet intervenes or approaches. Dogs that are highly aroused must be avoided. In some cases a water rifle, air horn, or long leash can be used to safely remove the dog from the situation. If the aggression and arousal does not immediately subside, consider locking your dog in a dark, quiet room, until it settles down and will come out for food or play. Since redirected aggression arises out of other forms of aggression, it is important to identify and treat the initial cause of aggression (e.g. fear, territorial, sibling rivalry, etc.), or to prevent the problem. This can be accomplished by avoiding exposure to the stimulus for aggression or by keeping a leash and head collar or leash and muzzle on your dog when exposure is possible.

***What are some of the other causes of aggression?***

Aggression associated with medical disorders may arise at any age, may have a relatively sudden onset and may not fit any canine species typical behavior. Some medical conditions can, on their own, cause aggression, but in many cases a combination of behavioral factors and medical problems cause the pet to pass a certain threshold at which aggression is displayed. Infectious agents such as rabies, hormonal imbalances such as hypothyroidism, psychomotor epilepsy, hyperkinesis, neoplasia, and a variety of genetic and metabolic disorders can cause or predispose a dog to aggression. Painful conditions such as dental

disease, or arthritis, and medical conditions causing fever, fatigue or sensory loss might increase the pet's irritability.

In rare circumstances, aggression has no identifiable etiology and no particular stimuli that initiate the aggressive displays. There may be a genetic propensity to aggression in some lines of some breeds, but many of the cases previously labeled as "idiopathic", "rage" or "mental lapse aggression" have been disputed and in some cases subsequently reclassified. Only when there is no identifiable stimulus or cause for the behavior, or when an abnormal EEG is documented, should the diagnosis of idiopathic aggression be considered.

Although learned aggression can refer to dogs that are intentionally trained to act aggressively on command (or in particular situations), learning is also an important component of most other types of aggression. Whenever a dog learns that aggression is successful at removing the stimulus, the behavior is further reinforced. Some forms of aggression are inadvertently rewarded by owners who, in an attempt to calm the pet and reduce aggression, actually encourage the behavior with patting or verbal reassurances. Pets that are threatened or punished for aggressive displays may become even more aggressive each time the situation recurs.

Treatment with flooding is intended to teach the pet that the stimulus is not associated with any harm and that aggression will not successfully remove the stimulus. With desensitization and counter-conditioning, the dog is not only taught that the stimulus is safe, but that it is associated with a reward.