



Palm Beach Veterinary Society NEWS

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SPRING 2024

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NEXT MEETING DATE

June 6, 2024

Location

Mayacoo Lakes
Country Club

Topic:

**Transcatheter Edge To
Edge Mitral Valve Repair**

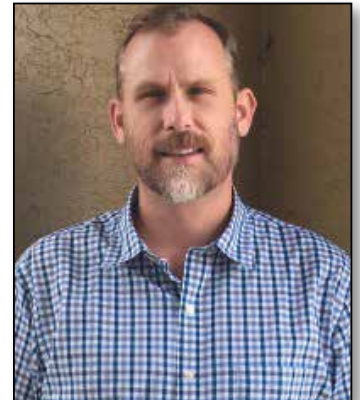
6:30-9:30 pm

Entry Fee: Free to 2024 Paid
www.pbvs.info/events

Vet Society Members

Dear Palm Beach Vet Society Members,

Today I am making my mess the message. If you have been in practice for any length of time, you know that clients behaving poorly can be a major job stressor. In fact, Dr. Natalie Fayman, is conducting a survey of our members about some of their job stressors, and client interactions is sure to be one. I have seen some things in my 25+ years of practice. The client who used a cat carrier to clobber a colleague upside the head in the exam room. The client screaming in my face that he was a Nazi and that if anyone hurt his dog, he was going to shoot them. The client that dropped to the floor screaming rape because she could not get a refill of Heartgard. Yep, all certifiably crazy. My most recent one was the wife of a client came in demanding I sign a prescription, that I just received a few hours prior, from Chewy for a dog food I have never prescribed before. She then called back and kept my staff on the phone for 40 minutes berating them with comments like "How much is he paying you to say this" and "You work for my dog". Yep, this "Karen" got a letter firing her from the practice, as she well deserved. Some clinics are taking to "Client Behavior Contracts" that outline unacceptable behavior and what will get the client fired from the practice.



Steve Simmons, DVM

But this is my point. It is not merely enough to fire these clients, hand them a copy of their records and show them the door. These types of clients rarely change their behavior. They are going to travel to the next nearest veterinary clinic and behave the same way. We need to document in the medical record, perhaps in graphic detail, their poor behavior so that the next veterinarian, and all the ones that follow, know just what type of client they are inheriting. This way, the next veterinarian can decide if they want to take on this problematic client. Don't downplay this behavior or sweep it under the rug. Call it out. Put a light on it for all to see. Sometimes, a good ole fashioned public shaming is what's needed. We need to support each other to help curb this behavior and maintain our own sanity.

"Don't let the bastards get you down" –from Cheers (Drink to that)
by Rihanna

Sincerely,
Steve Simmons, DVM



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This newsletter is published bimonthly by
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The PBVS newsletter is provided to PBVS members free of charge. **Membership is \$150.00 per calendar year.**

For more information about membership please contact: Dr. Leanne Browne-Feldman at secretary@pbvs.info To advertise in this newsletter, please contact Dr. Karina Salvo at vicepresident@pbvs.info.

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If you are a veterinarian and are interested in joining our society, please fill out the 2016 membership form on the last page.

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Membership begins on January 1st and ends on December 31st

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MEETING SCHEDULE - MARK YOUR CALENDAR

June 6, 2024

Transcatheter Edge to Edge Mitral Valve Repair

Speaker: **Dr. Dewey Carpenter from Sawgrass Cardiology & Dr. Marcos Unis, DACVS**

2 hour of RACE CE credit

Time: Buffet Dinner served at 6:30 pm, Lecture starts at 7:00 pm

September 5, 2024

Addison's & Cushing's Disease

Speaker: **Dr. Long from Dechra**

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1.5 hours of RACE CE Credit (Cushing's)

Time: Buffet Dinner served at 6:30 pm, Lecture starts at 7:00 pm

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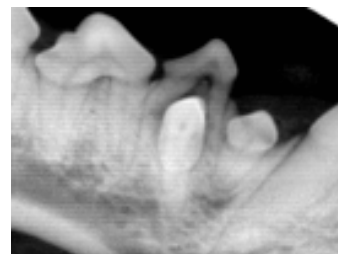
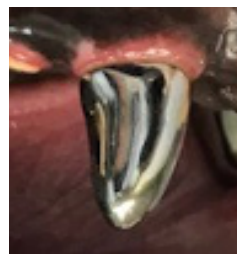
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AGGRESSION IN DOGS: Etiology, Signalment, and Management

todaysveterinarypractice.com

September/October 2023



Abstract

Canine aggression poses a major concern to dog owners due to the risk for injury, financial loss, and damage to the human-animal bond. A number of predisposing factors influence a dog's general threshold for aggression: genetic predisposition, prenatal environment, exposures during early socialization, and environmental circumstances. There are a number of possible motivational factors, but fear and stress are often the underlying factors. A comprehensive treatment plan for canine aggression involves a risk assessment, client education, addressing any health concerns, environmental management, behavior modification, and appropriate therapeutics to address underlying fear or anxiety. Environmental management is arguably the most important factor, and this article describes a number of basic guidelines that may be implemented at the general practice level to set up success for patients and households.

Continued on page 9

BEHAVIOR

Aggression in Dogs: Etiology, Signalment, and Management

Julia Albright, MA, DVM, DACVB

University of Tennessee College of Veterinary Medicine, Knoxville, Tennessee

Kevin Pflaum, DVM

Blue Ridge Veterinary Behavior Services, Asheville, North Carolina

todaysveterinarypractice.com • September/October 2023

The term “aggression” encompasses a wide range of behaviors and can be seen in many contexts. In dogs, severity can range from a hard stare and stiff body to prolonged biting attacks. Canine aggression poses a major concern to dog owners due to the risk for injury, financial loss, and damage to the human-animal bond. Aggression may also be an indicator of the dog’s poor mental and/or physical wellbeing. Although veterinarians can be instrumental in properly diagnosing and treating the behavior and

educating clients about canine aggression, most primary practitioners report that they do not feel qualified to do so.¹ Nevertheless, significant improvements can often be made through relatively simple steps achievable in the general practice setting.

WHAT IS AGGRESSION?

Aggression can be defined as a threatening behavior intended to cause harm to or increase

Take-Home Points

- Many factors, including genetic predisposition, prenatal environment, exposures during early socialization, and the animal’s environmental circumstances, coalesce to create aggression.
- High levels of fear and stress often underlie aggressive behavior.
- Any health concern can directly or indirectly contribute to aggression.
- Prognosis for complete resolution is poor in most circumstances. A realistic favorable outcome is that aggressive episodes are minimized to the degree that welfare for all people and pets in the household is satisfactory.
- Initial treatment should emphasize safety and management (e.g., avoidance, muzzle training, physical barriers of separation).
- Aversive training techniques should be avoided in all cases as they may worsen the dog’s underlying emotional state and increase the likelihood of future aggression.
- Environmental management by itself is not sufficient for optimal results; a complete behavioral treatment plan includes behavioral modification and therapeutics to target fear and anxiety and any underlying health concerns.

Continued on page 10

distance from the recipient.² It can also be described as the facial expressions, body postures, and vocalizations used to communicate these intentions. Overt behaviors with threatening intent are growling, snarling (baring teeth), head-whipping, snapping, biting, harsh barking, hard stare, and stiff body. Some of these behaviors can be also be observed in nonaggressive contexts, like play. Critical, yet underrecognized, precursors to aggression are fear and stress behaviors; therefore, subtle signals of distress (e.g., lip licking, dilated pupils, ears held to the side or flat to the head, tucking tail, avoidance by turning head or body)(**FIGURE 1**) usually precede overt aggression.

WHICH DOGS SHOW AGGRESSION AND WHY?

All animals are capable of aggressive behaviors when feeling sufficiently threatened, and there are many causal layers that determine why a particular animal behaves aggressively in a specific situation. An individual dog's general threshold for aggression is heavily influenced by genetic predisposition, prenatal environment (e.g., maternal stress or disease), and exposures during early socialization (approximately 4 to 14 weeks of age). Factors present immediately (seconds to weeks) before an event can also have an additive effect and drive a dog over its threshold. For example, a painful dog that is approached by an unfamiliar person in a loud environment is more likely to escalate to aggression than is a nonpainful dog approached by its preferred person in a quiet home setting. As



FIGURE 1. Example of a fearful dog displaying subtle signs of stress (e.g., lip licking, pinned ears).

veterinarians, our role is to identify as many of these factors as possible, particularly physical health concerns.

Health

Medical issues (e.g., mentation-changing neurologic diseases, acute pain) can directly lead to aggression. In addition, endocrine diseases, organopathies, or any source of discomfort (ranging from pruritus to chronic osteoarthritis) can create irritability and push a dog closer to its threshold for aggression. Recent publications argue that underlying pain is often correlated with problem behaviors.^{3,4}

Demographics

Although aggression is a normal part of canine behavior signaling, certain attributes may be more strongly associated than others with aggressive responses. The probability seems to increase with age, which may in part result from increased risk for painful comorbidities in older dogs.^{5,6} International survey studies have shown that the dogs at consistently high risk for displaying aggression are small dogs, fearful dogs, dogs with poor early socialization, and dogs of first-time owners.⁵⁻⁸ Owners of small dogs may not seek the help of a behavior professional after aggression is observed because small dogs seem less threatening and easier to manage. Behavior and temperament may not influence breeding decisions with regard to small dogs as strongly as for their larger counterparts because small size has been linked to a range of fear and anxiety behaviors with and without aggression.⁵⁻⁸ Owner reports of aggression are more consistently associated with fearful dogs and poor owner education than with any specific breed or sex.^{6,7,9-11}

Motivations

Fear

Fear leads to aggression when a dog feels it cannot avoid a threatening or a fear-producing stimulus. The so-called ladder of aggression describes how the physiologic fight-or-flight response often plays out in dogs.¹² Behavior escalates from mild stress displacement (fidget) to escape (flight) before intensifying to threats and injurious aggression (fight). Common situations in which a dog may display fear or defensive aggression include encountering startling stimuli (e.g., loud sudden noise, person moving from sitting to standing at close distance), being approached or reached toward,

Continued on page 14



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and encountering stimuli while on leash or otherwise confined. Novelty and lack of familiarity with the stimuli are additional layers that can amplify fear and push a dog past its threshold for aggression. For example, an unfamiliar person reaching out to pet a dog is much more likely to trigger intense aggression than the same action by a familiar family member. However, when a family member or other familiar person consistently triggers aggression, learned aversion to that person from a previous interaction is usually part of that dog's history. Aversive interactions from people include verbal or physical correction, but actions intended to be affectionate (e.g., hugging, reaching out to pet) can also be perceived as threatening. In many cases, the subtle stress behaviors may become fleeting or even absent with repetition as the dog learns that only the most obvious aggressive behaviors are effective for ending the unwanted interaction.

Possessive Aggression

Possessive aggression is a display of threatening behaviors in the presence of a high-value resource, such as a food bowl, long-lasting chew (e.g., rawhide, bone), favorite person, special toy, or comfortable resting area. Although any person or dog can be a target, those most likely to encounter the dog in these circumstances are family members. Conversely, the target (person or animal) of territorial aggression, or agonistic behavior directed toward a perceived threat to a dog's territory, is usually unfamiliar or outside of the dog's social group. Terminology for diagnosing aggression is inconsistent, but additional types may include, but are not limited to, social conflict; redirected aggression; impulse control; maternal aggression; and aggression induced by frustration, play, stress, or pain (see [ADDITIONAL RESOURCES](#)).

Multiple Motivations

Aggressive behavior can have multiple motivations (diagnoses) at any given moment. Consider the following situations. A dog may show obvious fear and avoidance to unfamiliar people or dogs off property but may rush aggressively at the same targets if they approach the house. The territorial motivation can combine with the underlying fear to create a very intense aggressive response. Likewise, a dog may normally avoid an adult male owner or child in the home due to fear of their actions or physical attributes, but if the same person approaches the dog while it is

resting on a couch with the preferred family member, the dog may exhibit aggression instead of avoidance because of some degree of possessiveness over the person or resting spot. Note also that confined physical space amplifies the fear and defensive aggression.

HOW SHOULD WE TREAT AGGRESSION?

A comprehensive treatment plan for canine aggression involves treating any underlying health conditions, educating clients, managing the environment, and applying behavior modification and appropriate therapeutics for any underlying fear or anxiety. In a typical general practice setting, a veterinarian can help the family of an aggressive dog identify and manage all contributing factors.

Because any medical conditions, especially painful conditions, can lead to irritability and decrease the threshold for aggression, a minimum database for a patient presented for aggression should include a thorough medical and behavioral history, physical examination to the extent the patient's temperament allows, complete blood count, chemistry panel, free T₄ (thyroxine) level, and urinalysis to help screen for and address contributing medical conditions. Note that some signs may be missed on initial presentation to the clinic (e.g., musculoskeletal pain in stoic or distressed dogs), and reassessment or empirical medication trials may be warranted. Holistic wellbeing also encompasses mental health, and adequate physical and mental stimulation (e.g., food puzzles, scent games, reward-based training) for that specific dog and family should be discussed.

Environmental Management

Arguably the most important step in a canine aggression plan is environmental management (setting

Additional Resources

- Landsberg G, Radosta L, Ackerman L. *Behavior Problems of the Dog and Cat*. 4th ed. Saunders; 2023.
- Overall KL. *Manual of Clinical Behavioral Medicine for Cats and Dogs*. Mosby; 2013.

Continued on page 15

up the environment to prevent aggression). The most obvious reason is to reduce the risk for injury, but avoidance also improves the success rate of behavior modification. The best training plan exposes the dog to the triggers in controlled situations only and prevents rehearsal of the aggressive behavior or strengthening of any negative association with the target. From a neurobiological standpoint, a dog that is constantly showing aggression has unhealthy levels of stress neurochemicals (e.g., glucocorticoids, inflammatory cytokines), which can have both short- and long-term health and welfare consequences.¹³ Dogs experiencing chronic stress are much closer to their threshold for aggression. Conversely, dogs in low-stress states are less likely to show aggression because they are far below their aggression threshold and can also focus more effectively during training sessions.

Below are some typical aggression-triggering situations and possible environmental modification tactics for avoiding aggression. Strict environmental management is recommended until a reputable behavior professional can be consulted. In all circumstances, when there is a chance that a physical interaction or bite injury will occur, using a basket muzzle (with appropriate acclimation before use) is recommended to decrease the risk for injury.

Visitors entering the home

- Prevent aggressive display before the guest enters.
 - Place a note on the front door asking visitors not to knock or ring the bell, and ask visitors to call or text before arriving.



FIGURE 2. Use of window films in the home can reduce a dog's stress by blocking its view of people outside.

- Use films directly on windows to block the dog's view of people approaching the house (**FIGURE 2**).

- Place the dog in a secure area away from the door (e.g., crate, bedroom, secured outdoor space) before the visitor enters.
- Ensure that the dog has positive associations with the location before visitors are present by having the dog spend time there with a high-value object or food toy.
- Provide a positive distraction by offering a long-lasting food toy several minutes before the guest arrives.
- Block the sight line between the dog and visitor, and create safety with a solid barrier.
- Mask sound with a white-noise machine.

Person approaching while dog is on furniture

- Do not approach and sit down near the dog.
- Instead, stop several feet away and lure the dog off the furniture with a happy, upbeat voice, tossing treats away from the furniture.
- In cases of mild distress associated only with the approach, the dog may be allowed to return to the furniture after the person is seated.
- If there is any doubt, the dog should remain off the furniture. If the dog will not stay on a comfortable resting spot on the floor, continue to lure it to a crate or other location behind a physical barrier.
 - Create an alternative desirable resting location with comfortable bedding and a long-lasting food toy to help the dog choose to spend time there instead.
 - To prevent access to furniture or the person to whom aggression is targeted, physical barriers, including pens, crates, or tethers, may be used.

Person approaching and intends to pet the dog

- Do not approach, reach out, or reach over the dog.
- Instead, stop several feet away with a nonthreatening body stance (turn to the side, kneel if possible) and call the dog over.
 - In this situation, the use of food can create emotional conflict and may mask the signs a dog does not want to interact.
 - People should not approach with a treat or use food to lure the dog, and the handler should not give treats while someone is approaching, unless the approach cannot be avoided (e.g., some veterinary staff interactions).
- If the dog approaches with loose, calm body language, a hand with palm up can be slowly presented. Do not extend the hand out to the dog. A dog who wants to be petted will usually come all the way to the hand.

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- Pet for no more than a few seconds before pausing to assess if the dog remains interested.
 - A dog who moves into the hand with calm body language is interested in the interaction.
 - A dog who moves away or does not move is uninterested at that moment.
- Prevent the approach of and any interaction with certain people if there is a history of aggression toward those people. Instead, those people can ignore the dog entirely, or treats can be tossed *from a distance* to promote positive associations.

Encountering people or dogs while on walks

- Avoid high-traffic areas and times.
- Drive the dog to spaces not traditionally frequented by dogs or people for exercise (e.g., cemeteries, industrial parks).
- Use head collar walking devices for the most control without pain.
- Slowly acclimate the dog to any new device.

Aggression between dogs in the same household

- Identify and remove resources that may be guarded (e.g., food, chews, bones, toys).
- Separate dogs with barriers during meal feeding.
- Complete separation may be necessary if triggers cannot be controlled or avoided.
 - Pens, gates across doors, or longer gates to divide a room
 - Hands-free leash
- Basket muzzles are strongly recommended for situations in which the dogs may need to be together; however, do not substitute muzzles for other solid barriers, and allow the dogs space to reduce social stress.

Additional Treatment Steps

Environmental management is a necessary but insufficient step for optimally reducing canine aggression. Many factors coalesce to create aggressive behavior; therefore, a treatment plan should be multimodal. Behavior modification is 1 important aspect of a complete treatment plan. Good training changes not only the behavior but also the underlying emotional association with the aggression target. In other words, we want to treat the cause of the aggression. However, a detailed plan is beyond the scope of a typical general practice appointment.

Behavior modification sessions can be implemented by the veterinary team in longer, behavior-focused

appointments, or the client can be referred to a board-certified veterinary behaviorist or an outside trainer. A reward-based approach is best, but identifying the right professional can be challenging.¹⁴ Pharmaceuticals and nutraceuticals that address fear and anxiety can be helpful in many cases but are limited when used alone.¹⁵ The prognosis for complete resolution of canine aggression is always poor. However, aggression is akin to any chronic disease, and a realistic favorable outcome is minimization of aggressive episodes to a degree that all people and pets in the household experience a state of wellbeing.

HOW SHOULD CLIENTS RESPOND DURING AN AGGRESSIVE EPISODE?

After the veterinary team recognizes the high prevalence of fear in most aggressive episodes, it should be more obvious that aversive punishment is contraindicated. The use of verbal correction or devices such as prong or electric training collars can seem to be effective for changing unwanted behavior through suppression, but the causative underlying emotional state is not addressed and potentially worsened.^{5,14,16} Aversive punishment-based techniques have been shown to increase signs of stress, fear, and aggression.^{14,17}

Conversely, studies have suggested that dogs trained with only reward-based methods have fewer behavior problems, display more playful and confident behaviors, and have higher task-learning success compared with dogs trained with aversive tools.¹⁸⁻²⁰ As veterinarians, a priority should be treating the source of any disease, not just the clinical signs, particularly if symptomatic treatment can lead to a worse long-term outcome. Another priority is client safety. The use of aversive training tools and techniques is associated with higher rates of injury to the owners.¹⁶

Aggression is a symptom of the dog's underlying negative emotional state, and for that reason the best way to respond to a dog acting aggressively is to rapidly reduce the fear and stress by interrupting the behavior in a positive manner and creating distance from the target. If a dog is growling at a person or another dog, the dog can be lured away from the target by whatever motivates the dog (e.g., an upbeat voice, tossing of treats, squeaking a toy, showing the leash, jingling keys). Similarly, if being held on leash, the dog should also be moved away from the target while luring with these exciting or pleasant stimuli. The targeted person

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should always be instructed to back away. Many dog owners become concerned that adding pleasant stimuli is reinforcing the aggression, but this is not the case. Not only do these techniques defuse a dangerous situation, but they teach the dog that low-level threats will be heeded and that escalation to injurious aggression is not necessary. The family and behavior professional can learn from that situation and create a prevention plan based on better assessment of body language, avoidance, and behavior modification outside of the aggressive episode.

SUMMARY

A number of causal factors and emotional motivations may result in aggressive behavior. Health concerns and high levels of fear and stress are often underlying and should guide treatment strategies. A complete behavioral treatment plan consists of environmental management, behavioral modification, and therapeutics to treat underlying fear, anxiety, and stress. Environmental management is arguably the most important strategy for setting up dogs and households for success, and a number of those basic guidelines may be implemented at the general practice level. **TVP**

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Aggression in Dogs: Etiology, Signalment, and Management

TOPIC OVERVIEW

Veterinarians should understand that an individual dog's threshold for aggression is influenced by many factors. Environmental management and assessing underlying physical health and fear and anxiety motivational factors should guide appropriate responses and treatment; however, complete resolution is unlikely. A favorable outcome is minimized aggression to a degree in which the welfare of all people and pets in the home is satisfactory.

LEARNING OBJECTIVES

After reading this article, general practitioners should be able to recognize aggressive signaling in dogs, the factors predisposing to the development of aggression, and the basic components of a behavioral treatment plan.

This article has been submitted for **RACE approval for 1 hour of continuing education credit** and will be opened for enrollment upon approval. To receive credit, take the test at vetfolio.com by searching the name of the article or scanning the QR code below. Free registration is required. Questions and answers online may differ from those below. Tests are valid for 2 years from the date of approval.



- Which body posture is likely to precede an aggressive bite in a dog?
 - Ears flattened to the head
 - Stiff body
 - Tucked tail
 - All of the above
- Which demographic factor is the strongest risk factor for aggressive behavior in dogs?
 - Small adult dog
 - Working breed of dog
 - A dog in a family of experienced dog owners
 - All of the above
- What is the most common underlying emotion associated with canine aggression?
 - Dominance
 - Fear
 - Territoriality
 - Redirected
- Which physical condition can contribute to aggressive behavior in dogs?
 - Endocrine disease (e.g., hypoadrenocorticism)
 - Age-related sensory changes
 - Osteoarthritis
 - All of the above
- Which diagnostic tool is the lowest priority in the presentation of an aggressive dog?
 - Magnetic resonance imaging
 - Serum chemistry profile
 - Thorough history from client
 - Orthopedic examination
- Avoidance of triggers for aggression is not appropriate to discuss with a client of an aggressive dog because it is not treating the underlying cause.
 - True
 - False
- Food and an upbeat voice should not be used to lure the dog away from a territorial area because this will reward the aggressive behavior.
 - True
 - False
- Which statement regarding tools like prong or electric collars for aggressive behavior is correct?
 - Tools that use pain or discomfort are more effective in changing behavior than reward-based tools.
 - Electric collars are acceptable because the technology is similar to that of therapeutic transcutaneous electrical nerve stimulation.
 - Tools that use pain or discomfort are needed to create a hierarchy between the human and dog.
 - None of the above are correct.
- Which aspect of a treatment plan is of lowest priority to discuss in a typical appointment?
 - Detailed behavior modification plan
 - Anxiolytic medications
 - Environmental management
 - Analgesic medication trial if pain may be indicated as a contributing factor
- It is important to stress to a family living with an aggressive dog that canine aggression is rarely curable and that permanent environmental changes are often needed for safety and wellbeing.
 - True
 - False