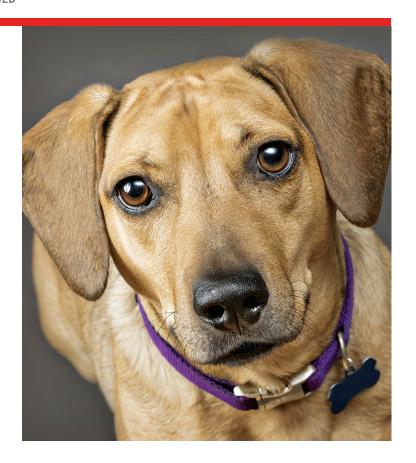
Canine Aggression **During Veterinary Examination**

Lore I. Haug, DVM, MS, DACVB, CABC Texas Veterinary Behavior Services Sugar Land, Texas



Bailey, a 2-year-old, 56-lb (25.4kg), spayed crossbreed dog was presented for a routine annual examination. She barked and growled at another pet owner in the lobby and at the receptionist who escorted her into the examination room, where Bailey sat pressed against the owner with her ears back and face averted. When the clinician and veterinary nurse entered and came within approximately 3 feet of Bailey, she barked, growled, and lunged slightly with mild piloerection and her tail tucked, ears back, and lips retracted.

History

Bailey was adopted at 12 weeks of age from a shelter and has always been somewhat fearful of humans in public and at the practice. Bailey underwent an ovariohysterectomy at 7 months of age without incident; however, during the recheck examination, she was anxious and fearful and hid under the owner's chair while growling at the veterinary team, who removed Bailey from the owner and restrained her. When Bailey was later presented for an ear infection, she was markedly more distressed, and, although she was muzzled and restrained, an adequate examination could not be performed. Otoscopic medication was dispensed and administered by the owner at home.

At the annual examination, the owner reported that Bailey was fearful of strangers and barked, growled, and/or lunged at humans or dogs within 15 feet of her in public areas. She was apprehensive of unfamiliar visitors to the home, especially men, and barked and avoided them. She snapped if a stranger approached closely and tried to touch her. Bailey was friendly and sociable with familiar humans.

Physical Examination & Behavior

After Bailey settled down from her initial aggressive response, team members sat quietly and tossed treats to Bailey, which she ate. After approximately 5 minutes, Bailey cautiously approached the female veterinary nurse to sniff her leg and took a treat warily from her hand. At the 10-minute mark, Bailey began to move more comfortably in the room with her tail down (but not tucked) and ears intermittently forward. Her lip commissures and facial muscles remained moderately tense and tight. She approached the female clinician and the veterinary nurse to take food and stood in front of them. She

TREATMENT AT A GLANCE

- ▶ A baseline assessment of fear level and stimuli that trigger avoidance, escape, or defensive aggression should be established.
- ► An effective previsit pharmaceutical protocol should be established for the patient.
- ► Training for safety measures (eg, muzzle training) and other foundation exercises (eg, targeting, relaxation training) should be outlined.
- ► Husbandry training procedures should be implemented.

MUZZLE TRAINING

- ► Muzzling poses a significant stressor, adding to stress factors associated with a visit to the practice. Muzzle training at home can help the dog relax and be comfortable wearing the muzzle.
- ► Training is often done with a basket muzzle; however, some dogs are less intimidated by a mesh sleeve muzzle. Although sleeve muzzles allow for easier food delivery, they can only be used for short periods and in climate-controlled situations.
- ▶ Dogs should be taught to voluntarily enter the muzzle for a reinforcer such as food.
- ▶ See **Suggested Reading**, page 26, for more information.

allowed the clinician to briefly pet the side of her face and neck while eating treats but backed away if the clinician tried to touch her back. At the 15-minute mark, the veterinary nurse moved to sit on the floor and Bailey backed away and did not approach again. When the veterinary nurse stood up, Bailey barked, growled, and retreated to the owner. A direct physical examination was delayed until her behavior could be treated.

DIAGNOSIS:

FEAR AGGRESSION

Treatment

Muzzle training was recommended (see Muzzle *Training*). Trazodone was prescribed as a previsit pharmaceutical; the owner was instructed to give Bailey a 4 mg/kg PO test dose and report her response to the clinician. Two friendly visits focused on training were scheduled over 4 weeks to work on building a relationship between Bailey and the veterinary team and to assess the efficacy of the trazodone dose for reducing distress in the practice environment (see Treatment at a Glance). No procedures were performed during the visits.

Outcome

Bailey was premedicated with trazodone (4 mg/kg PO) 2 hours before she was presented for her first friendly visit and was estimated by the clinician to be moderately less anxious based on body language and interaction with team members. When team members entered the room, Bailey growled softly, but after 2 minutes she approached for treats and responded to basic cues (eg, sit, hand target). Her tail was down but not tucked, her ears came forward more frequently, and her pupils were less dilatated. There was no piloerection. After 10 minutes, she allowed team members to briefly pet her head and back while being given treats. A muzzle was not worn during this visit.

For her second friendly visit, Bailey was premedicated with trazodone (6 mg/kg PO) 2 hours prior to the appointment and was presented in her sleeve muzzle. By the end of the appointment, she allowed team members to stroke her back and sides briefly while eating food through her muzzle. She was estimated by the clinician to be 50% less anxious as compared with her initial annual examination visit.

Bailey's annual examination was rescheduled for 2 weeks after the second friendly visit. The owner was asked to premedicate Bailey with trazodone (8 mg/kg PO) 2 hours prior to the appointment and to bring a fecal sample to avoid the distress of sample collection at the practice. Heartworm testing was delayed until a future visit to avoid a high level of restraint too early in the clinician-patient relationship; heartworm prevention was prescribed to maintain a consistent administration schedule. The examination was broken into small segments to give Bailey a brief respite every 15 to 30 seconds. Bailey stood and ate during auscultation, examination of the skin and coat, and evaluation of the lymph nodes. She was apprehensive (ie, ears back, glances toward the clinician with tense facial muscles, partially tucked tail) during abdominal palpation but continued to stand and eat before stepping away. Further palpation was not attempted, and injections were not administered.

Bailey's owner was advised to continue veterinary visit training to build on Bailey's developing relationship with the veterinary team.

Discussion

Fear and aggression during veterinary examinations and procedures are relatively common.

Patients may try to escape or show defensive aggression throughout the visit or during certain procedures. Aggression may be directed only at certain team members (eg, male vs female).

Dogs that are uncomfortable around strangers are more likely to develop fear aggression at the practice because they are being handled by strangers who may inflict discomfort during certain procedures. Some dogs show apprehension in response to any kind of restraint or medical treatment, even when administered by owners; in the author's

experience, these dogs are at a particularly high risk for developing aggression during veterinary procedures, even as young puppies.

The severity of a dog's reaction is determined by its individual temperament (eg, level of anxiety trait), its early socialization and training, its level of pain sensitivity, and the number of previous unpleasant experiences the dog has had at the practice. The intensity of the aggression is also affected by how the owner handles husbandry tasks (eg, positively and patiently vs combatively) at home and the type of training the owner uses, as some types of interactions (eg, force restraint, alpha rolls) can erode the animal's trust in the owner and promote defensive reactions.

The initial treatment goal for dogs with severe fear and/or aggression at the practice is to prepare the dog for full sedation at the next examination or for sick visits using muzzle training at home, testing of previsit pharmaceuticals at home and at the practice prior to the appointment, and counterconditioning for injections at home and at the practice. The long-term goal is to train the dog to voluntarily cooperate with various aspects of an examination, as well as injections and venipuncture. The patient should be sedated for any procedure that it has not yet been trained to tolerate.

Dogs with mild-to-moderate defensive aggression may respond rapidly to good preparation and appropriate previsit pharmaceuticals (eg, trazodone, clonidine, benzodiazepines, gabapentin [used alone or in combination]). Some patients may require previsit pharmaceuticals for life, whereas others may be gradually weaned off if the patient is handled correctly at each examination. Procedures, even simple ones (eg, nail trims), that may or will push the patient above its tolerance threshold should always be performed with the patient under sedation.1 Although nail trims are generally short and uncomplicated, they can be traumatizing to many patients. Of important note, the duration of the procedure should not be a determining factor in whether a patient is given sedation to reduce its distress.

25

include attention to the mental well-being of the patient, as psychologic status is inseparable from

Dogs can be trained to voluntarily cooperate with a variety of husbandry and medical procedures (eg, oral and otoscopic examinations, auscultation, abdominal palpation, venipuncture, temperature reading, rectal examination, anal sac expression, ultrasonography). The degree of training necessary for accomplishing these tasks varies and is largely dependent on the dog's degree of

distress at the start of training (ie, intensity of the dog's unpleasant conditioned emotional response to the task) and how much time the owner and veterinary team are willing to invest in the longterm outcome. Dogs that have not yet developed significant aversive reactions to tasks often can be trained to cooperate with various procedures in a short period of time.^{3,4}

TAKE-HOME MESSAGES

- ▶ Although not all stress is detrimental, pain and psychologic distress in patients are undesirable.
- ► Clinicians are tasked with improving the health and welfare of their patients, so every effort should be made to handle animals humanely and appropriately for the species.
- ► Adequate use of previsit pharmaceuticals is recommended to reduce stress and pain.

References

physiologic health.²

- 1. Hekman JP, Karas AZ, Dreschel NA. Salivary cortisol concentrations and behavior in a population of healthy dogs hospitalized for elective procedures. Appl Anim Behav Sci. 2012;141(3-4):149-157.
- 2. Dreschel N. The effects of fear and anxiety on health and lifespan in pet dogs. Appl Anim Behav Sci. 2010;125(3-4):157-162.
- 3. Ward SJ, Melfi V. The implications of husbandry training on zoo animal response rates. Appl Anim Behav Sci. 2013;147(1-2):179-185.
- Schapiro SJ, Bloomsmith MA, Laule GE. Positive reinforcement training as a technique to alter nonhuman primate behavior: quantitative assessments of effectiveness. J Appl Anim Welf Sci. 2003:6(3):175-187.

Suggested Reading

Fear free: taking the pet out of petrified. Fear Free Pets website.

https://fearfreepets.com. Accessed November 2018.

Helping pets live happy, healthy, full lives. Fear Free Happy Homes website. https://fearfreehappyhomes.com. Accessed November 2018.

Herron ME, Shreyer T. The pet-friendly veterinary practice: a guide for practitioners. Vet Clin North Am Small Anim Pract. 2014;44(3):451-481.

Horwitz DF. Blackwell's Five-Minute Veterinary Consult Clinical Companion: Canine and Feline Behavior. 2nd ed. Hoboken, NJ: John Wiley & Sons; 2018

The muzzle up! project. Muzzle Up! website. https://muzzleupproject. com. Accessed January 2019.

Westlund K. To feed or not to feed: counterconditioning in the veterinary clinic. J Vet Behav. 2015;10(5):433-437.

Yin S. Low Stress Handling, Restraint and Behavior Modification of Dogs & Cats. Davis, CA: CattleDog Publishing; 2009.

LOOK FOR THESE ARTICLES IN FUTURE ISSUES

- ► Top 5 Sedation Protocols for Short Procedures
- Step-by-Step: Identifying the Linea Alba & Avoiding Paramedian Incisions
- ► The Veterinary Profession's Role in Addressing the Opioid Crisis
- Rabbit Ectoparasites
- Marijuana Toxicity Case