applied behavior QUESTION & ANSWER OF THE MONTH

Assessing Risk & Prognosis in Aggressive Dogs

Debra F. Horwitz, DVM, Diplomate ACVB, Veterinary Behavior Consultations, St. Louis, Missouri

Today I fielded a hysterical call from a client because her dog bit her child. How can I help her decide what to do?

aturally, when a pet bites, owners become upset. Unfortunately, biting is quite common; recent research conducted in a general veterinary caseload reported 15.6% of sample dogs had shown biting behavior. It is prudent to help owners decide what to do and how to proceed. A metabolic disorder or pain can contribute to aggression, so appropriate physical examinations and laboratory testing should be done in all cases of aggression. Any abnormal findings should be treated if possible and the behavior reassessed, as learning may have contributed to the ongoing aggressive responses and aggression may thus persist after the medical problem is resolved.

Secure the Situation

The first step is to provide safety from the aggressive pet. After separating the pet from individuals, use confinement, muzzles, leashes, and head collars, as needed, to create a safer environment.

Assess the Risk

Determining what triggers the behavior will help avoid future incidents. Depending on temperament, genetics, and experiences, in certain circumstances all dogs can and will bite. Once a dog has bitten, it becomes evident that biting is a behavioral strategy the dog is willing to use; the dog thus presents a higher risk for future biting than one that never has bitten. Biting behavior is rarely cured, rather it is controlled, and with safety precautions may become less of a risk.

Things to Consider

Certain family compositions make keeping an aggressive dog quite unsafe. Those with small children, elderly persons, physically or mentally

FACTORS AFFECTING RISK & PROGNOSIS IN AGGRESSIVE DOGS

- Willingness of owners to live with risk
- Family composition
- Ability to provide safety
- Size of pet
- · Predictability of behavior
- Context
- Choices made by the pet
- · Severity of aggression
- Severity of injuries sustained
- Ongoing medical disease



disabled persons, or those with an unpredictable household schedule may not be suitable for rehabilitating an aggressive dog: the safety of people who live there must be paramount.

Confinement

Providing safety for people who might encounter the pet takes many forms. It may mean keeping the pet away from either the triggers and/or the victims. The confinement must be secure: a crate, a room with a lock, a locked yard with a fence that the dog cannot jump or climb. An adult should put the pet into confinement. Because many dogs are unaccustomed to confinement, training to be confined must be part of the plan for it to be a realistic and workable option. Confinement must occur every time the trigger for the aggression might be encountered; many families are unable to ensure this happens.

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Muzzles

In some situations, muzzles provide additional safety. Various types are available; plastic basket muzzles are often more comfortable for dogs to wear for extended periods. A dog can be trained to wear a muzzle in calm, nonaggressive situations and then the muzzle might be a useful adjunct safety device when aggressive triggers are encountered. Head collars and leashes also offer increased control, allowing easier removal of the pet from situations that may provoke aggression.



Size

Bigger dogs do more damage when they bite. In a study of risk factors for euthanasia of dogs that were aggressive toward family members, those weighing more than 18 kg (40 lb) were more likely to be euthanized especially if the aggression was shown in "benign dominance challenges such as petting and bending over the dog."2 This is a particularly interesting finding as later research of risk factors for dogs to bite owners in a household setting found that small dogs posed a higher risk of biting family members when compared to larger dogs.3 Most likely, people are more tolerant of biting behavior

by small dogs when compared to larger dogs because of the perceived diminished danger of serious injury.

Predictability

Whether or not the dog is predictable about when and how aggressive it will be in response to certain triggers must be considered when determining the prognosis. Reisner et al found that dogs whose aggressive behaviors were unpredictable were more likely to be euthanized than dogs that were predictable.² If the dog always growls when someone tries to move him, that dog may be more likely to remain in the home compared to a dog that sometimes growls and sometimes stands up, lunges, and bites in the same situation. The predictability makes it easier for some owners to avoid the triggers and subsequent injury.

Context

In some settings, aggression is understandable although unwanted. These include handling food, painful manipulations, extremely frightening situations, and redirected aggression. It may be possible to manage these situations or to medicate the animal to diminish aggressive responses.

Severity of Aggression

It also helps to consider the severity of the aggressive behavior and the choices that the dog has made. Dogs in general have good control of their aggressive signaling. They can threaten (growl, snarl with or without a growl), they can snap (bite without making contact), bite without puncture or laceration, or they can inflict injurious damaging bites. Historical information gathered during a behavioral consultation should attempt to determine if the dog had other choices, was willing to signal its intent to be aggressive, and whether the aggressive behavior has escalated over time.



- Offer to board the dog during risk assessment
- Advise clients about protective measures:
 - Confinement
 - "Trigger" avoidance
 - Muzzling
- Referral to a veterinary behaviorist for evaluation and treatment

Severity of Injuries

Finally, the severity of the injuries inflicted should be considered. Some dogs may inflict only a single bite, while others bite multiple times within a single episode. Some bites might be directed toward the stimulus (a hand reaching for the dog), while in other cases the dog may attack other body parts (jumping up at the torso or face). More extreme responses and severe injuries requiring medical attention usually are associated with greater risk and poorer prognosis. Also, dogs that show very explosive aggressive responses, especially in response to low-level stimuli, are particularly dangerous.

Making the Best Choice

Owners often have a difficult time deciding what to do. In many cases, offering to board the dog allows the family to consider the options without feeling threatened. Some will decide to take the dog home again, while others will realize they can no longer live with the risk. Once a dog has bitten, all families need help to manage and treat the problem. In many cases, referral to a veterinary behaviorist for further workup and treatment is the best option.

See Aids & Resources, back page, for references, contacts, and appendices.