



# DOG Watch

Expert information on medicine, behavior and health from a world leader in veterinary medicine

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A Lab becomes "blood-thirsty at the sight of any animal, large or small."

## IN THE NEWS ...

### Kennel Boarding Could Just Be Fun – Not Stressful

Contrary to popular wisdom — and some owners' experience — scientists in the U.K. have found that short-term boarding in a kennel could provide an exciting change of scenery for dogs rather than cause stress.

Researchers analyzed indicators from skin dryness, body temperature and diet to anxious lip licking, hormones and adrenaline in 29 dogs in three kennels. They had assumed noise, novelty and change in routine would stress them.

Instead, while the dogs appeared to have a higher level of excitement compared to measurements in their home, no evidence suggested they were negatively stressed by kenneling, according to the study published in the journal *Physiology & Behavior*.

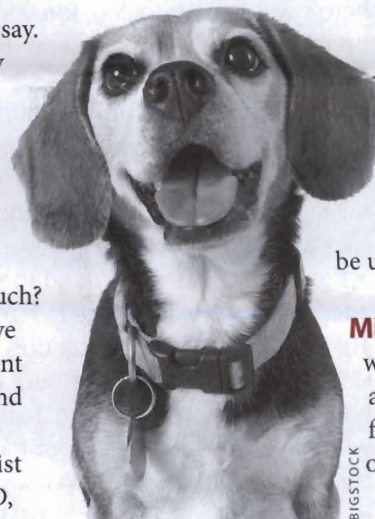
Academics from the University of Lincoln in the East Midlands, University of Birmingham, Queen's University in Belfast and Royal Veterinary College in London hope their study will help establish a baseline of physiological, physical and behavioral indicators for dog welfare. ♦

## Dog Speak: Woof, Woof and WOOF!

*What's behind all that barking? Fear, attention-seeking, dementia and, most of all, their evolution as protectors*

Dogs must have a lot to say. They communicate by barking to go out, barking to come in, barking at people, cars and other animals, and barking simply to shout "I'm here!" to the universe at large.

Are they saying too much? "What constitutes excessive barking is largely dependent upon the circumstances and what the owner considers acceptable," says behaviorist Katherine A. Houpt, VMD, Ph.D., professor emeritus at Cornell University College of Veterinary Medicine.



Beagles are most likely to be excessive barkers.

"For example, if a dog barks when the occasional person walks by in a rural area, that may be OK. But that same behavior in a retirement community where people are walking by all the time would be unacceptable," she says.

**Middle Ground.** "Some owners want their dog to bark anytime anyone approaches the house for security reasons, while other owners would prefer that their dogs not bark at all. Somewhere in the middle is what I might consider normal."

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## Promising Drugs for Mast Cell Tumors

*Research shows that 50 percent of cancerous cases respond to treatment with certain chemotherapy drugs*

While surgery continues to be the most common treatment for cancerous mast cell tumors (MCTs), advances in veterinary medicine are paving the way for other therapies tailored to individual dogs' needs.

At the forefront are new diagnostic tests, a study of the effects of a medication used in severe cases and genetic research on why, in one example, a certain breed may be predisposed to the disease.

**DNA Defect.** "Studies have shown that some mast cell tumors have a defect in their DNA that causes a tyrosine kinase receptor — a protein on the cell's surface that

signals the cell to grow and survive — to be on all the time, which leads to cells multiplying uncontrollably," says Cheryl Balkman, DVM, ACVIM, senior lecturer and chief of oncology at Cornell University College of Veterinary Medicine. "Although this fact has been known for many years, we now have a commercial test available for veterinarians to determine if the tumor has this mutation."

This knowledge helps in making better decisions about treatment and prognosis. While tumors with the mutation behave more aggressively, they are also more likely to respond to a tyrosine kinase inhibitor (TKI), Dr. Balkman says. The drug Palladia

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# The Remedy for Excessive Licking

*It begins with an exam to identify one of the many causes, from illness and allergy to arthritis*

Dogs who lick themselves excessively represent more than a frustration for owners. The dogs are at risk of harming themselves, and what's more, their licking is a sign of an underlying problem.

"If the animal licks without too much vigor, the licked area will be hairless but not inflamed or infected," says dermatologist William H. Miller, Jr., VMD, at Cornell University College of Veterinary Medicine. "With more passion, the skin can be abraded and might become infected."

**Pain Triggers.** Excessive licking means that the area is itchy or painful or that the dogs has a behavioral problem, Dr. Miller says. Those broad areas can have many possible causes. Dogs can suffer from skin disorders and painful conditions such as arthritis or illnesses that can trigger pain.

"A dog licking near his tail head could have anal sac disease, among all the

other reasons for licking," Dr. Miller says. "Fleas are a biggie. Environmental allergies are a possibility."

Some dogs will lick their feet to the extent that a red, shiny sore called a lick granuloma develops. Any dog can develop one, but some breeds seem more prone to the problem, including Doberman Pinschers, Great Danes and Labrador Retrievers. Lick granulomas often begin as the dog's attempt to relieve itchiness or pain caused by atopy (an allergic reaction), demodectic mange or bacterial or fungal infections, but licking can also become an obsession. (See sidebar.)



**Doberman Pinschers** are among breeds who will lick their feet until a red sore called a lick granuloma develops.

**'Itchy Skin Diseases.'** An examination by a veterinarian is the first step to try to determine the cause of the licking. "Thousands of different things must be considered," Dr. Miller says. "For instance, if the licking isn't triggered by behavior or pain, then all the various itchy skin diseases are fair game. First and foremost, the dog needs a good history and physical examination."

The veterinarian will ask about your dog's diet, medications or supplements, observations about his licking behavior, his daily routine and changes you may have noticed, the home environment, changes in detergents or cleaning agents, and whether any other pets in the home are showing similar signs.

The physical exam will include evaluating body and coat condition, checking the ears, checking joints, bones and other areas of the body for swelling or pain, signs of parasites, palpating the abdomen to assess the condition of the organs and much more.

The area where the dog is licking may be a clue. "If pain is the underlying cause, the area licked usually is very focal or regionalized," Dr. Miller says. "For example, a dog with arthritis might lick the painful area before the signs of lameness or pain become obvious to the owner."

The history and exam can whittle the list of possibilities to three or four top contenders. Lab tests may then be necessary to determine the actual cause. Tests vary depending on the conditions the veterinarian is considering. They might include skin scrapings, a fungal culture or blood work if an underlying disease is suspected.

**Simple Treatment.** Once the cause is identified, treatment may be as simple as a flea preventive, or it may require more detective work, such as putting the dog on an elimination diet to determine if a certain ingredient is making the dog itch, or switching to an unscented detergent to see if that makes a difference. Veterinarians can prescribe analgesics for arthritis or other painful conditions.

Apoquel, a medication the Food and Drug Administration approved last year, holds great promise for relieving the itch of allergic dogs, but its real role in clinical medicine won't be known for years until its been used in thousands of dogs. Zoetis, the manufacturer, says the fast-acting drug "improves inflammation in dogs that suffer from allergies, without many of the side effects commonly associated with steroids." ♦

## WHEN ANXIETY IS THE CAUSE

While lick granulomas can have a physical cause, they may also be related to anxiety or boredom. Behaviorist Katherine A. Houpt, VMD, Ph.D., professor emerita at Cornell, recalls the case of a dog who began to lick his paws when he was alone. She suspects it began as separation anxiety.

"The dog had been moved from one house to another, same owners but different environment, several times," she says. "That seemed to cause him to lick himself."

A similar case she had involved a retired guide dog who began to lick himself, probably because he no longer had his usual routine and a job to do.

Common causes of excessive licking include the presence of a new family member or conflicts with other animals. Dogs may be helped by enriching their environment with items that divert him from licking his paws.



it may be worth owners' requesting a 'prognostic' analysis of the tumor that is excised from their dog."

These tests are performed on surgical specimens rather than cytology or fine-needle biopsy samples. When MCTs can't be completely removed, veterinarians often recommend radiation to treat the residual disease. Chemotherapy drugs are usually reserved for Grade III tumors or metastatic Grade II tumors.

**Monitoring Drugs.** Common side effects of chemotherapy are diarrhea and decreased appetite, although a lowering of white blood cells and increased protein loss through the kidneys can also occur. "It is very important that patients receiving these drugs be monitored routinely via physical exam, blood work and urinalysis," Dr. Hume says. "For owners with pets receiving these medications, it is also important that they communicate any abnormalities they note in their pet to the prescribing veterinarian."

Dogs with MCTs often receive antihistamines to help prevent side effects from mast cell degranulation — the

release of chemicals from within the cells — such as inflammation or stomach ulceration. Steroids are also useful in decreasing inflammation associated with the tumors.

The cost of diagnosis and treatment depends on the tumors' location and progression. A fine-needle aspirate and cytology will cost about \$75, depending on the clinic. Surgery costs can range from \$250 to \$2,500, depending on the complexity of the procedure. If chemotherapy is indicated, the size of the patient helps determine the fee, which can run \$300 to \$700 per month. Any additional imaging, such as chest X-rays or ultrasound, would be an additional \$200 to \$300.



Owners should regularly check their dog's skin for small, firm raised bumps and report any abnormality to his veterinarian.

"If owners feel the options presented to them are not feasible, they should consider what is financially feasible and work with their dog's veterinarian to determine an appropriate course of action within their means. It does not have to be an all-or-nothing approach," Dr. Hume says, adding that many clinics have payment plans and financial support.

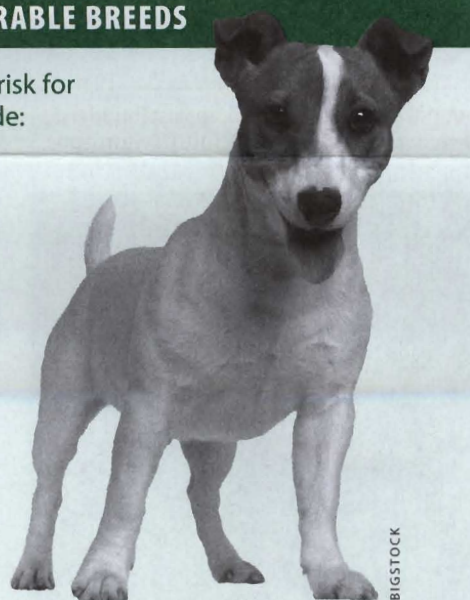
The outcome for completely removed Grade I and Grade II tumors is excellent. The prognosis for incompletely removed Grade I and II tumors treated with radiation therapy after surgery is also excellent, with approximately 90 to 95 percent of dogs having no recurrence within three years. The prognosis for dogs with Grade III tumors is more guarded, as recurrence and spread of the disease are likely. Only a small percentage of the dogs live beyond a year of surgery.

Owners of those diagnosed with MCTs should not despair, however. Many dogs with MCTs may live many years with appropriate therapy. As genetic research continues to increase veterinary medicine's understanding of mast cell tumors and their best treatment, the prognosis for canine patients is likely to only improve. ❖

### THE VULNERABLE BREEDS

Breeds identified as having a high risk for developing mast cell tumors include:

- ◆ Beagles
- ◆ Boston Terriers
- ◆ Boxers
- ◆ English Bulldogs
- ◆ English Bull Terriers
- ◆ Golden Retrievers
- ◆ Jack Russell Terriers
- ◆ Labrador Retrievers
- ◆ Pugs
- ◆ Schnauzers
- ◆ Shar Peis
- ◆ Staffordshire Bull Terriers



Jack Russell Terriers are among breeds prone to mast cell tumors.



If your dog has age-related dementia (canine cognitive dysfunction) or deafness, causing him to bark because he's unable to hear himself bark, be patient with him. Keep the environment simple, orderly and consistent. Teach your deaf dog the "quiet" command using hand signals, a flash of light or a vibrating collar as the cue.

For other dogs, a primary veterinarian can be helpful in referring you to a

positive reinforcement-oriented trainer, who will have multiple gadgets and techniques at his or her disposal. For example, devices that emit ultrasound that only dogs hear work so effectively that the result is almost like pressing a mute button on a barking dog.

**Clever 'Bark-meters.'** The devices, which are not harmful to dogs, can even be hidden inside decorative birdhouses

to stop a neighbor's dog from barking. However, dogs may eventually habituate to these devices. There are also "bark-meters" such as Ricko DogSitter on the market. They count the number of barks emitted by a given dog. This can be helpful in determining the degree of your dog's barking behavior or in gathering evidence to present to a neighbor with a dog who's a problem barker.

Behavior modification can also go a long way. "It can be as simple as putting your dog in another room, closing the curtains or putting up window shades to block the dog's view of outside activity that can set off barking," says Dr. Houpt, who advised shades for the Cairn Terrier who barked at the window. If your dog barks at passersby when he's in the yard, bring him inside.

"Training a dog by praising with a 'Good quiet!' immediately, followed by a treat, is an excellent way to positively reinforce quiet behavior," Dr. Houpt says. "Such training is most effective with younger dogs, but older dogs can learn, too." ❖

## FIVE CAUSES AND TACTICS TO DETER THEM

Determining the reason your dog barks requires observation and sometimes a bit of detective work. The causes and solutions to problem barking include:

1. **Attention:** Your dog may want food, a walk or attention.

*Solution:* Ignore the barking as long as it takes him to stop. When he finally quiets, even to take a breath, reward him with a treat.

2. **Boredom/Frustration:** Your dog may have been left outside or confined to one room for too long. Because dogs are pack animals and we humans are their pack, it's unnatural and inhumane to leave your dog unsupervised all day and/or night. It also exposes your dog to risks like other animals, teasing children and the possibility of being stolen.

*Solution:* Have your dog share your life indoors.

3. **Fear:** Your dog may be afraid of certain people, places, animals or loud noises, such as thunder. The signs are flattening his ears and holding his tail down.

*Solution:* Gradually desensitize your dog to the source. Start with the stimulus such as a stranger at a non-threatening distance away. Feed him treats. Move the stimulus a little closer. Feed more treats. Your dog will learn to associate the stimulus with good things.

4. **Territoriality/Protectiveness:** Your dog may regard people and dogs in adjacent yards as intruders. His posture is threatening, with his tail and ears up and forward.

*Solution:* Contradictory as it seems, the first step in teaching your dog to be quiet is to first teach him to bark. Once he reliably barks on command, say "Quiet" and hold a treat in front of his nose. Say "Good quiet!" and give him the treat. Alternatively, when your dog starts barking, ask him to do something that's incompatible with barking, such as lying in his bed.

5. **Playfulness/Excitement:** Pent-up energy may be making your dog overly playful and excited when greeting people.

*Solution:* Remember that a tired dog is a good dog. Depending on his breed, age and health, your dog may require several long walks each day, in addition to chasing balls and playing with toys.

## WHAT YOU SHOULD KNOW

Keep your training sessions positive and upbeat. If you shout at your dog to be quiet, he'll think you're barking along with him.

- ◆ Be consistent. Have everyone in your family apply the same training methods every time your dog barks inappropriately. Getting away with inappropriate barking sometimes, but not always, will confuse your dog.
- ◆ You may want to set up a tape recorder or video camera when you leave the house to find out if he barks when you're away.
- ◆ Don't expect results overnight. The longer your dog has been barking excessively, the longer it will take to convince him that silence is golden.