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No Tramadol For Arthritis

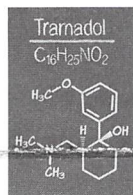
New study shows tramadol has no effect on canine arthritic pain

We are constantly on the lookout for additional medications that can provide pain relief for dogs with osteoarthritis. One such medication that has come to the forefront is tramadol. Tramadol is an opioid analgesic similar in some ways to morphine. It can be addictive but is considered to be very safe with minor side effects overall.

Veterinarians at the University of Georgia looked at tramadol for pain relief for 35 dogs with elbow or stifle arthritis. The dogs received one of three treatments: a placebo (a substance with no therapeutic effect; in this case, lactose powder), carprofen (Rimadyl), or tramadol. In addition to owner observations, dogs were objectively measured by gaiting over force plates.

The study showed no improvement in dogs through treatment with tramadol. In fact, the tramadol dogs did about the same as the placebo dogs. Carprofen did make the dogs more comfortable and improve the objective evaluations on movement. Using the results of this study, it appears that tramadol is not an effective medication for pain relief in dogs with bony arthritis. ■

Journal of the American Veterinary Association, February 15, 2018



Dogs Dig It

Digging has a purpose

Dogs love to dig—and they make it look like so much fun. What you may not know is that it's rarely an entertainment exercise. "Usually the reason is to reach a goal," says Katherine Houpt, VMD, Ph.D., former president of the American College of Veterinary Behaviorists and emeritus professor of animal behavior at the Cornell University College of Veterinary Medicine. "The goal can be a critter, burying or finding a bone, a cool place excavating a den, or even imitative behavior if they have observed their owner gardening." Northern breeds, like Malamutes, might be seeking a cool place to escape the warming weather.

Rarely does digging become compulsive, but you may not be able to deter him either. Chicken wire under the



Dogs usually have a goal when they dig.

dirt and rocks just make the dog seek a different spot. And, no, designating a "digging spot" rarely works.

If your dog is insistent on digging, you may need to get creative. "It is always better to give the dog something else more interesting to do than dig. Outside toys such as large balls or tug toys suspended from trees or a wading pool can help," advises Dr. Houpt. ■

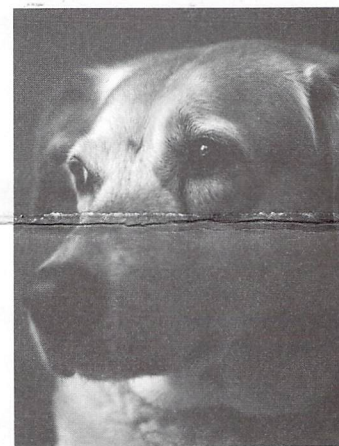
© 5 THINGS

Five Cancer-Surgery Thoughts

Knowledge is power with cancer decisions

Veterinary oncologist Dr. Susan Ettinger, DVM DACVIM (Cornell 1998) shares five things for owners to consider when doing any cancer-related surgery on your dog in her newsletter, Dog Cancer Blog (dogcancerblog.com):

- 1 Don't just watch and wait. It is better to take action when you find a lump or abnormality. An aspirate or biopsy will help you and your veterinarian develop a plan of action for your dog.
- 2 Ideally, don't remove a lump without knowing ahead of time if it is cancerous. See #1. With knowledge comes the power to determine the best next step.
- 3 Don't decline sending tissues out for histopathology. That biopsy may give you relief or give you a warning that you need to plan how to proceed carefully. The cost of a biopsy is minimal compared to cancer care for your dog.
- 4 Don't simply assume "clean margins" means enough tissue was removed. Your veterinarian will want to know just how big those margins were. For some tumors, even a slight margin of tumor-free tissue is enough. For other cancers, wide margins are important to prevent recurrence.
- 5 Don't assume a specialist will cost more. Many referral and specialty clinics offer competitive prices for the specialized care they provide. A referral to a specialist may also save you "in between" steps, and the cost of those adds up too. ■



Make a biopsy your first step, so you know what may be ahead.

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Omega 3s Help Post-Operative Inflammation

This should be combined with a custom rehab program

Your dog's recovery from cruciate (a ligament in the dog's knee) surgery done via TPLO (tibial plateau leveling osteotomy) may be helped with a little dietary tweak and proper rehabilitation. Veterinarians at Oregon State looked at diet and a set rehabilitation program to see if they would truly help to decrease lameness (both in frequency and severity) and lead to increased physical activity. Objective values through gait analysis with a pressure sensitive walkway, muscle-diameter measurements, and activity monitors were looked at, as well as pain-scoring tests done by both veterinarians and owners.

There were four classes of dogs: one with the test diet only, one with the control diet only, one with the test diet and rehab program, and one with the control diet and rehab program. Multiple breeds were involved. The test diet was based on being protein-rich and rich in omega 3 fatty acids. No outside supplements were allowed. The dogs had passive range of motion exercises, along with sit-stand exercises, controlled walking, and work in an underwater treadmill. For six months, the dogs were to strictly eat their assigned diet (along with a few treats but less than 10 percent of the daily diet) and given a rehab program to follow.

Dogs given the test food that was protein-rich with added omega 3 fatty acids, along with the set rehabilitation program, had the most improvement for activity and soundness in this trial.

A second area of study was looking at radiographic changes, such as the development of osteoarthritis, and checking for markers of synovial (joint) fluid inflammation such as prostaglandins. An interesting finding was that the dogs on the test diet had a slightly slower rate of healing. Dogs on the test diet had fewer inflammatory markers, and when the test diet was combined with rehabilitation, there was less evidence of osteoarthritis progression.

The take-home message for dog owners is that it is worthwhile to consider a diet with extra omega 3 fatty acids to help reduce inflammation, as well as implementing a custom-designed rehabilitation program to follow surgery for cruciate repairs. While the study results can certainly be applied to surgery and injury to other joints, those areas will need further study to verify results. ■

Dog Words in a High-Pitched Voice

What you say and how you say it matters to your dog

Baby talk, termed "dog-directed speech," aids communication with you, say researchers at the University of York (U.K.). Older studies on speaking to your dog found that talking in a high-pitched voice with exaggerated emotion, as adults do with babies, improved engagement with puppies but made little difference with adult dogs.

The previous experiments used a loudspeaker without a human present. In the York study, a human was in the room with the dog. This was normal for the dogs and helped the team test whether dogs paid more attention to dog-directed speech and if it motivated them to spend more time with the person who used dog-directed speech.

The adult dogs listened to one person using dog-directed speech that contained phrases like "you're a good dog" and "shall we go for a walk?" Another person then used adult-directed speech with no dog-related content, such as "I went to the cinema last night." The dog's attention during the speech was measured and, following the speech, the dogs were allowed to choose which speaker they wanted to interact with. The speakers then mixed dog-directed speech with non-dog-related words and adult-directed speech with dog-related words to determine whether it was the high-pitched emotional tone of the speech that dogs were attracted to or the words themselves.

"We found that adult dogs were more likely to want to interact and spend time with the speaker that used dog-directed speech with dog-related content," says Alex Benjamin, a psychology doctoral student. ■

University of York. ScienceDaily, March 6, 2018.



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What Not to Wear: Dog Leashes

Retractable leashes are for quiet, private outings

Leashes are a wonderful canine accessory: function with the option for fashion. Leashes keep our dogs safe from traffic, away from toddlers waving ice cream cones, and close by at night when you aren't in the mood for a chase through the woods. Leashes allow us to exercise our dogs safely without bothering other people nearby who might not love dogs as much as we do.

You can select a leash in any color or pattern, a wide variety of lengths, and various materials. But, while there is a time for every leash, every leash is not for every time.

Sometimes rules dictate what leash you can use. Some dog events prohibit retractable leashes on the grounds. Public places, like state parks, may have leash-length limits. Here are some guidelines to choose the best leash for your outings.

At the Veterinary Clinic: Short Leash

Your veterinarian's office is a place where dogs from very different backgrounds and with very different stories come together. This is not a place for dogs to mingle. Use a four- to six-foot (or shorter, if you have a taller dog) sturdy leash attached to a well-fitted collar or harness (you could also just go with a slip lead).

Be respectful of all people and dogs (and other animals) in the clinic and keep your dog to yourself. You have no idea why each of those dogs is there or what they are like—some might be happy to play, while other dogs might be terrified or aggressive.

Some dogs might have contagious diseases that your dog could contract if you let him stick his face too close. Others might not be contagious but may feel awful—no one wants to be bothered when they are sick or hurt.

Don't count on the lock on your retractable leash to keep your dog close. The button can easily get knocked as you fill out paperwork during check-in or check-out, or while you are texting as you wait. Stick to a standard leash—frankly, the shorter the better.

If you don't have one or forget to bring it, ask for a leash at the front desk. Every clinic has spare slip leads, and the staff will be happy to loan you one. No one wants to deal with a dog fight, and no one wants more dogs to get sick.

At the Pet Store: Short Leash

Pet-supply stores are a great place to take your dog for socialization and to see new things. They also have varying numbers of other dogs whose histories you don't know, varying numbers of roaming children, and row upon row of items for sale that block visibility. Your dog needs to be under your control at all times. Again, stick with that short, sturdy leash.

Retractable leashes leave way too much freedom for your dog to get into trouble in this setting. If he goes around a corner ahead of you, you can't see what he is doing or what people and dogs he might be encountering. He could be peeing on merchandise, bouncing at a dog that doesn't like strange dogs, or knocking over a toddler. If your dog is freely roaming an aisle and another dog comes around the corner, you might not have time to reel him in.

Dogs do not have to be friendly to go in stores and shouldn't have to be. They just need to be calm and under the control of their owners so that everyone is kept safe. It is your responsibility to respect the space of people and dogs that you don't know and only allow your dog to approach others if he is invited.

At Dog-Training Class: Short Leash

All the people and dogs at a class are there because they want to learn. Playtime may be part of the class, but for the rest of the time the dogs should be in their own spaces focusing on their owners. Once again, a standard leash is the way to go. For most obedience training, a three- to four-foot leash is best so that there is less material to juggle, however, that may vary depending on the type of class and the width of your leash.

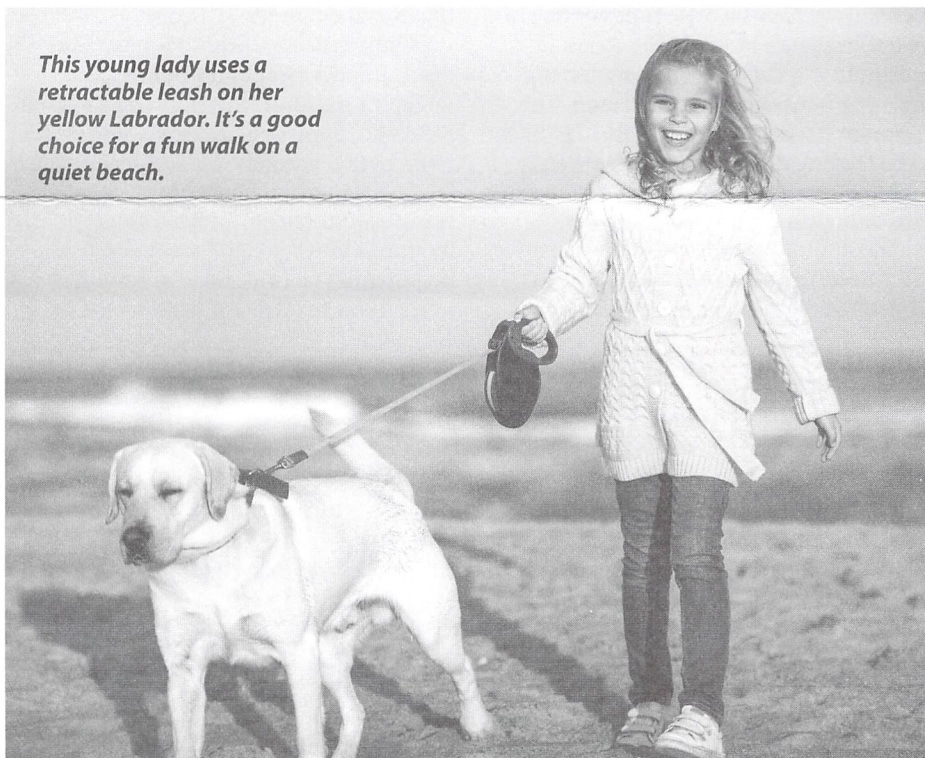
Walking Close to Roads: Short Leash

Tight spaces, cars passing close by, people coming in and out of stores and houses with minimal warning? Yup, you guessed it, grab that short leash. Retractable leashes allow your dog too much room to roam, and he could easily duck out into traffic or onto private property.

Out Hiking: Let the Fun Begin

Break out the retractable leash! These leads shine out in the open: They give your dog plenty of room to run around you and explore, without having to trip over and maneuver 15 or so feet of line yourself (we would avoid longer retractable leashes). If you encounter other hikers, you can briefly reel your dog in until they have passed, then it's game on again. But be sure you hold that button down to prohibit it from releasing and allowing your dog to get too close. ■

This young lady uses a retractable leash on her yellow Labrador. It's a good choice for a fun walk on a quiet beach.



Ban Those Bothersome Bugs!

We've got ways to make your property less bug-friendly and ingredients to choose for effective repellents

Many products help fight fleas and ticks on our dogs, but deer flies and mosquitoes can drive our dogs crazy, too (a few flea-and-tick products will repel or kill mosquitoes). These bugs are irritating and, worse, they can spread deadly disease.

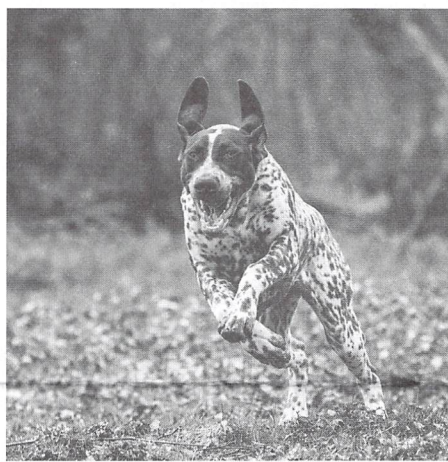
Mosquitoes, of course, can carry deadly heartworm (See April 2018 “Easy Parasite Control for Adults”). West Nile virus and equine encephalitis rarely affect dogs, but mosquitoes are the carriers and these diseases can be fatal. Few people realize deer flies can share Lyme disease and anaplasmosis—diseases we used to only associate with ticks.

Luckily, there are ways to minimize the numbers of these biting insects around our dogs. While repellents help (and we discuss them below), we think it's wise to implement environmental ways to reduce our dog's exposure to these bugs.

Mosquito Patterns

While there are over 140 species of mosquitoes found in the United States, the two most common are *Aedes aegypti* (Asian tiger mosquito) and *Culex pipiens* (common house mosquito). These mosquitoes have favorite times of day to be out in search of food. The Asian tiger mosquito is a daytime biter, preferring morning hours and late afternoon. The common house mosquito is the one likely to be feeding during dusk and the early night hours. There are species willing to feed almost any time, however.

Mosquitoes are temperature-sensitive. They need temperatures over 50°F somewhat regularly to emerge. Snowy



This German Shorthaired Pointer is moving so fast there's no worry about mosquito bites.

winters are mosquito-free, but places with temperate conditions in the winter months may still have mosquitoes.

In general, mosquitoes avoid very hot, sunny, and dry conditions, preferring damp areas. They need water to lay eggs and for other stages of their life cycle, so they tend to congregate around ponds, streams, pools, and any collection of stagnant water, which includes things like old tires, stock tanks, and watering cans that aren't emptied.

Only female mosquitoes bite. They need a blood meal to produce eggs. Different mosquito species tend to prefer different “food” species, and some prefer birds over mammals. Many species will feed on any warm body, however.

Mosquitoes are attracted to prey by the carbon dioxide breathed out by potential victims. So, your dog is more likely to attract mosquitoes if he

is breathing heavily or panting after strenuous exercise. Mosquitoes also may be attracted to certain fragrances.

You can minimize mosquito bites by keeping your dog inside or behind mosquito screens or netting during the prime feeding times. Be sure to dump any containers holding stagnant water to disrupt eggs and larvae.

Natural mosquito killers for adult mosquitoes include bats and many bird species. If you have a pond, you can stock it with fish that prefer mosquito larvae as their diet. Gambusia, goldfish, and small koi will eat mosquito larvae. Larval dragonflies eat larval mosquitoes, while adult dragonflies eat adult mosquitoes. That is certainly a win/win situation!

You can plant mosquito-repelling plants around areas where your dog likes to hang out in the yard. Good plant choices include lavender, citronella grass, catnip, marigolds, rosemary, basil, and scented geraniums.

To repel mosquitoes, you can burn citronella candles or torches in the evening. Be sure your dog can't knock over the candles or torches. You can also make a homemade mosquito repellent spray by mixing up lemon juice with water. Be careful not to spray this near your dog's eyes or on any cuts or raw areas on his skin.

Mosquito Sprays for Dogs

Lemon eucalyptus oil works for dogs as a mosquito repellent. Eucalyptus is often used via collar tags with oil included in/on the tag, such as from **Daisy Paw** (daisypaw.com). Avoid putting essential oils directly on skin, especially if undiluted. A dilute spray can work if sprayed lightly over the hair coat. **Neem oil** is an effective mosquito repellent and works for other bugs, too, including fleas and ticks.

When looking at commercial insect-repellent sprays for dogs, we'd choose one that incorporates neem oil and citronella, such as **Ark Naturals Neem Protect Spray** (arknaturals.com). Look for products with clearly labeled ingredients and use as directed.

Note: Always do a “test spray” to check for reactions on a small area, especially if your dog has a short, thin hair coat. Wait 24 hours to see if your dog has any type of reaction—itching, labored breathing, swelling, inflammation—before applying the spray to a larger area.

Avoid preparations with DEET, as this can be toxic for dogs. As noted above,

Coat Color

Warm, dark coats attract mosquitoes

Dark-colored dogs tend to attract more mosquitoes than light-colored dogs. Mosquitoes are attracted to dark colors, and they are also attracted to body heat. As you probably know, darker coats have higher heat retention. You can feel the difference when you put your hand on a black dog vs. a white dog out in the sun. Mosquitoes can sense that as well. A bright white mesh coat, such as the **K9 Cool**

Coat from Saratoga Horseworks (horseworks.com), may be helpful. It reflects UV rays, and you can wet it and put it on your dog for additional body cooling.



This black Labrador gets some heat and bug relief from his white mesh coat.

some flea-and-tick topical products will also repel mosquitoes.

Darn Those Deer flies

The name “deer fly” covers a variety of biting insects of the species *Chrysops*. These flies are often in semi-shaded areas. They avoid deep shade, like in a barn or truly deep woods, but love sun-dappled wooded areas. While dawn and dusk tend to be prime feeding times, deer flies will bite and feed all day long. Their preferred temperatures are 72°F to 90°F, and their prime season is usually June and July.

Just as with mosquitoes, only female deer flies bite and feed. They make a mini incision, add some anticoagulant from their saliva, and then draw a blood meal into their bodies to help with egg production. The anticoagulants may stimulate allergic reactions. Even without that, the bites from these flies hurt and leave behind a painful welt.

Like mosquitoes, deer flies are attracted by carbon dioxide, so again, heavy breathing after exercise will draw them to your dog. They also prefer darker-colored animals. This is related to body heat and the increased warmth of a dark coat in the sun. Deer flies tend to bite on the heads and necks of their prey. You can easily spot raised welts, often with a drop of blood on the tip, on the nose after your dog is bitten.

Deer flies seem to have a special fondness for prick ears. Many dogs will have extensive bites from deer flies, and to a lesser extent from mosquitoes, on their ears. Once the ears have bites, they attract more biting insects, causing a vicious cycle of sores and small wounds.

Deer flies like to lay eggs in marshy, damp soil. The larvae prefer aquatic/semi-aquatic habitats. Hornets, dragonflies, and some birds will eat adult deer flies, and some wasps will parasitize the eggs.

Deer Fly Defense Citronella, neem oil, and lemon eucalyptus oil

sprays can help keep deer flies off your dog, such as found in **Only Natural Pet Easy Defense Herbal Spray** (onlynaturalpet.com). A spray of diluted (50% water) apple-cider vinegar—yes, the stuff available in your grocery store—may also help.

All these sprays should be kept away from your dog's eyes and any raw sores or wounds. Try to keep your dog from licking after an application of spray. Any dog may develop skin or respiratory irritation from any repellent sprays,



They may share an adventure, but they can't share bug repellents! Never use a repellent on a cat unless the label says "approved for cats." Many dog-friendly products are toxic to cats.

especially if they have a thin coat. Always do that 24-hour spot test.

There are a couple of commercial “roll-on” products that work very well for treating dog ears prior to walks in deer fly habitats, such as **Earth Heart's Buzz Guard** (earthheartinc.com). This should be applied to both the inside and outside of a prick ear. Again, do a small “test” area to check for any skin irritation or allergic reaction. A roll-on may also be used (gently) on the top of the nose, ideally out of “tongue reach.”

These products may use essential

oils such as citronella and neem oil or may use pyrethrins (synthetic chemical derived from a chemical in chrysanthemum flowers). Toxicity is low, but you should not let your dog lick or chew on the roll-ons.

The ointment **Dog's Best Friend** (brooktonlabs.com) is a treatment for dog-skin problems like bug bites, hot spots, and itchy skin. It includes *Nigella sativa*, which is also called black cumin or black caraway. It does double-duty as it also has shown effectiveness repelling deer flies and ticks. ■

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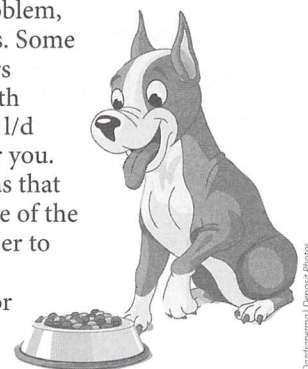
Therapeutic and Prescription Diet Restrictions

A specific diet for a health problem means recommended treats only

If your dog is on a therapeutic diet to control a health problem, any treats that she gets also need to follow the diet's rules. Some prescription diets also come in a treat formula, but others don't. For instance, Hill's Science Diet offers treats to go with Prescription Diet c/d Canine, h/d Canine, k/d Canine, and l/d Canine. Your veterinary clinic can probably order them for you.

Consult with your veterinarian to brainstorm treat ideas that are compatible with your pet's needs. You can also use some of the prescription kibble as treats when you're training (remember to subtract treats from the overall allowed daily intake).

This goes for treats used to hide medications as well. For example, if your pet needs a low-fat diet, fat-free cream cheese is a potential substitute for peanut butter. ■



Big Dogs Don't Cry

Drainage may indicate a dry eye, a serious problem

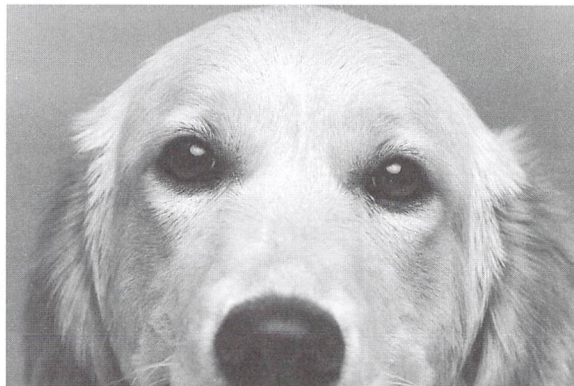
A dog's eyes are a window to his soul. He looks at you with love, and you gaze right back. That momentary connection can be helpful to you in judging eye health, too, because you know what his normal eye looks like. A dog who lacks the correct amount of moisture in his eye could end up with serious eye problems.

When a dog's eyes are too dry, and he is not producing tears, he's lacking natural protection and moisture for his eyes. It's called "keratoconjunctivitis sicca," commonly referred to as "dry eye" or KCS, and it can become serious.

But draining eyes aren't good either. If you see moisture below his eye, his tear duct may be blocked. Gunky discharge? That's not normal, either. "When ocular discharge starts to occur, the owner should consider taking their dog to the veterinarian," says Filipe Espinheira, LMV, DACVO, Assistant Professor of Ophthalmology at Cornell University School of Veterinary Medicine.

Tears play an important role in the protection and moistening of the eye. Tears are made of three different components: mucin, water, and lipids. The mucin helps the tear film to stick to the cornea, or the clear outer layer at the front of the eye. The aqueous layer brings nutrition to the corneal cells and takes waste products away (blood vessels do this job in most of the body, but blood vessels through the cornea would impair vision).

The lipid layer acts as something like a seal, preventing the other substances from evaporating and drying out the eye. Each component of tears is produced separately, and any imbalance in these substances can cause problems.



You should know what's normal for your dog's eyes. This Golden Retriever has clear, healthy eyes with no drainage.

The eye is a delicate organ, and any damage to it can progress quickly. An eye left with an insufficient or poorly functioning tear film is at risk for scratches and ulcers, which can get infected. Eye conditions that are left untreated can go on to impair your dog's vision, possibly permanently.

Diagnosis

Your veterinarian likely will start with the Schirmer Tear Test to measure your dog's tear production. This is purely a quantitative test, not qualitative, so the results only tell if your dog is making enough tears, not how well those tears are functioning within his eye.

For this test, the veterinarian or a technician will place the end of a special paper strip with a dye and measurement marks on it under your dog's eyelid to stimulate tear production. The strip is held in place for 60 seconds. As your dog's tears wick up the strip, they push the dye along, allowing your veterinarian to measure how far the tears got. A normal eye should produce 15 mm or more of tears in one minute.

Even with normal tears, your veterinarian may still diagnose him with KCS if the rest of the eye exam is consistent with a poorly functioning tear film. Your veterinarian will also place a small amount of fluorescein stain on the eye. This stain washes off a healthy cornea but will stick to any scratches or ulcers and temporarily stain them bright green.

Treatment

"Most dogs affected by KCS will need lifelong medication/management," says Dr. Espinheira. Treatment generally consists of topical cyclosporine or tacrolimus. Your veterinarian may also prescribe topical antibiotics to prevent infection if there are any scratches or ulcers on the eye. If you are concerned about putting medications on your dog's eye, ask your veterinarian or a technician to show you how to apply the first dose. Most dogs tolerate eye medications well.

KCS does require veterinary attention. "There are currently no at-home remedies that help dogs with dry eye," says Dr. Espinheira. "The only over-the-counter things to consider is using artificial tears as often as possible. Among the artificial tears, it is best to use ophthalmic gels or ointments." Drops evaporate or absorb into the eye quickly, so applying them gives only fleeting relief. Gel and ointment forms of artificial tears last longer, but still require frequent application to properly mimic real tears. These products are better suited for transient irritation, such as flushing something out of your dog's eye. ■

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Watch for the Subtle Symptoms of Dry Eye

- ▶ Discharge from one or both eyes, especially if it is thick and looks like mucous.
- ▶ Squinting, which indicates that your dog's eye is painful.
- ▶ Rubbing one or both eyes and seeming uncomfortable.
- ▶ Eyes look bloodshot, with thick red vessels or pink-red coloration.
- ▶ Vessels or pigment running across the front of the eye, or if the surface of the eye looks hazy instead of clear and bright (like dirty water versus clean water).

Myofascial Pain Is Real

Tired, overworked muscles can contract and “shut down,” cutting off blood and oxygen to the area

Many dog owners have told their veterinarian their dog doesn't seem to want to run anymore (or jump or fetch). They say he doesn't seem to hurt anywhere, so “I guess he's just getting old.”

Not so fast. That dog may be suffering from myofascial muscular pain, a chronic, continuous pain. Well recognized in human medicine, it's just beginning to be noted by veterinarians.

Whether it's due to repetitive overuse or a one-time injury, muscular pain can be just as debilitating as bone fractures and often are more long-lasting. Any dog, even couch-potato pets, can experience myofascial pain. Simply put, this is chronic, unrelenting pain in muscles and the connective tissues around them.

How It Happens

An injured muscle interferes with joint movement and can create exquisite pain. As well as from direct injuries, myofascial pain can result from low-grade but continuous exertions by a muscle.

Muscles are one of the tissues that can “fatigue.” The muscle can become exhausted by prolonged low-grade use or intense short-term use. Think how weak you feel after a long, hard run.

The belief is that, with myofascial pain, a group of fibers within the muscle become very tight and get shutdown in a state of contraction. While contracted, the muscle may cut off some of the blood supply to the area, causing further disability due to lack of oxygen to the tissues. It's like a muscle cramp.

If a dog has an orthopedic injury, he will try to hold that leg up off the ground and not use it. That requires contraction

of muscles over a long period of time. The damage to the muscle can also result from chronic arthritis pain and the dog's attempt to relieve the stress on the affected joint(s).

Trigger Point

The area of contracted muscle fibers creates a “trigger point.” When these sensitive areas are palpated, a dog may startle and look at the area or may even growl or move away. One muscle may develop multiple trigger points. Palpation is the easiest way to diagnose these areas of pain, but it requires patience and a skilled hand.

Once painful areas have been found, a treatment plan is developed. Medical lasers can provide relief. More commonly, the dog receives “dry needle” therapy, which uses acupuncture-type needles to stimulate the area of injured muscle.

The needles stimulate both local nerves right in the muscle and cause reactions through neural pathways to the spinal column. The goal is pain relief. As the contraction loosens, the dog feels relief. Standard treatment regimens are 20 minutes once a week until continued relief is noted.

Unfortunately, once trigger points have developed, they don't seem to ever completely go away. While they may be dormant and not cause a dog discomfort for weeks to even years, they can be reactivated with strenuous activity or a recurrence of the injury that caused the initial reaction.

Sport Dogs

The biggest problems associated with myofascial pain are in canine athletes.

Just like human athletes, these dogs repeatedly test the limits of their physical prowess. They have a greater risk of creating muscle trigger points as well as a greater risk of reactivating latent areas of myofascial pain.

The iliopsoas muscle in the groin area is a common site of canine muscle injury, as is the teres major by the shoulder. The iliopsoas is important for core strength, which is lacking in many dogs (see February 2018, “Peanuts for Core Strength”). The teres major muscle flexes and stabilizes the shoulder and can be injured by repeated rapid sideways movements, common in agility dogs.

All dogs with myofascial pain and muscle injuries benefit from careful rehabilitation techniques, anti-inflammatory medications, and treatment for pain. Exercises at home may include stretches, passive range-of-motion movements, and balance exercises. Limited activity (crate rest, leash walking) is part of the healing protocol. Dry needling is then used to work on the individual muscle trigger points.

If the goal is to return the dog to competitive sports, you will need a customized conditioning program. While some dogs may return to top levels, others will need to find other sports or activities as an outlet. The goal is to give your dog relief from muscle pain. ■

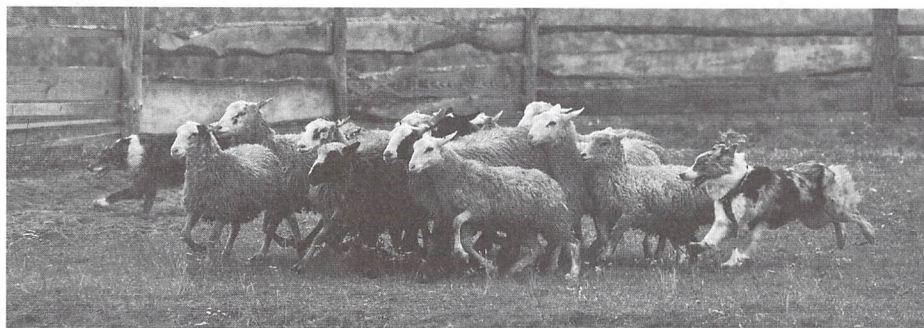
What You Can Do

- ▶ Practice proper warm-up and cool-down protocols
- ▶ Note subtle changes, such as a reluctance to run or play
- ▶ Vary your dog's exercise routines

Needles for Pain Relief

Acupuncture and dry needling

While similar needles are used for both acupuncture and dry needling, the principles underlying the therapies are quite different. Chinese-based acupuncture follows an ancient philosophy of treatment that is largely not based on science, even though it can be effective in pain control. Dry needling is based on modern neurophysiology and anatomy, with more similarities to Western-based acupuncture techniques.



Working dogs, like these two Australian Shepherds, can be prone to myofascial pain.

My Dog Doesn't Like to Eat

He'd rather go play! He eats what he wants and leaves

Q *I am having the worst time getting my dog to eat. He's eating about half what I think he should. He leaves food in the bowl, and he'll turn down a treat with a no-thank-you look, even if it's one he's enjoyed in the past. He would much rather run and play. I worry that he may not be getting all the nutrients he needs, but his weight is good.*

A Well, if his weight is good and he's active and otherwise healthy, you probably don't need to worry. "Finicky dogs are the best kinds to have because they regulate themselves. They eat to meet a requirement to keep themselves alive, not for pleasure. They are lean animals and usually live longer," says Dr. Joseph J. Wakshlag, Cornell University College of Veterinary Medicine Associate Professor, Sections of Clinical Nutrition and Sports Medicine and Rehabilitation, and Section Chief of Nutrition.

Some dogs are naturally finicky, and they have appetite and eating patterns similar to humans. "Hormones control part of this. There are appetite centers in your brain, and they control your hunger patterns—what and how often you eat,"

says Dr. Wakshlag. If he's always been picky, you know it's just the way he is.

However, it can also be due to disease, so if this is a new problem, it would be wise to get a veterinary checkup. A lack of appetite can be due to pain, dental problems, kidney disease, liver failure, or infection. There could be an ulcer on the tongue, loose teeth, or even a tumor in the dog's mouth.

If your dog is on a medication, it may cause a lack of appetite. Ask your veterinarian if that's a side effect. Opioids like morphine decrease the motility of the gastrointestinal system, and sometimes antibiotics cause inappetence. If your dog is on medication for allergies, it can change his appetite. Prednisone usually increases it while cyclosporine tends to decrease it.

If your dog won't eat and you've ruled out health reasons and medication side effects, try new dog food, and if new food doesn't work, then go to human food. You can make his food more palatable using chicken, broth, and cheese. Dogs like salt, sweets, and fats—not that you should over feed your dog that stuff! But, like people, every animal has different preferences. Be careful not to provide a smorgasbord of many different foods



Of course, he'd rather play! As long as his weight's good and he stays active, like this terrier, no problem.

Bjornndal | Deposit Photos

because that just creates an aversion to all of the foods we are trying to feed.


A note of caution: If your dog is diabetic and stops eating, something is probably wrong. Make an appointment with your veterinarian immediately. Your dog could be in a diabetic ketoacidotic crisis (a high concentration of the chemical ketones, caused by an excessive breakdown of fatty acids). That requires immediate veterinary attention. ■

⊙ HAPPENING NOW...

Do You Google? Of course you do! Did you know that what you type into that search-engine box can make a world of difference when it comes to veterinary information? A 2010 study proved what most of us already knew: The quality of Internet information varies widely. The researchers also concluded that the best information is obtained if you use anatomically correct veterinary terminology. For instance, use "canine cranial cruciate ligament disease" over "ACL tear." If you're not sure what phrase to use, ask your veterinarian. Don't be shy. We all do it.

Coming Up ...

- ▶ **Flea Products That Work**
- ▶ **How to Handle Incontinence**
- ▶ **Blue-Green Algae Emergency**
- ▶ **Keep Your Young Dog Safe**

Facebook Information. We've opened a  Like Facebook page for DogWatch to share timely information about recalls, illnesses, outbreaks, studies, and just-for-fun finds. Take a peak and give us a Like!

IBD Clinical Trial. Inflammatory bowel disease is a chronic gastrointestinal condition that can cause vomiting, diarrhea, or both. It can sometimes be reversed with dietary management using novel and/or hydrolyzed proteins. If you have a dog with chronic IBD (diagnosed by your veterinarian), your dog may be eligible to participate in this trial. Dogs accepted to

the program will receive all food for the study free of charge during the trial, a 10% discount on your hospital bill, and a \$300 incentive. If your veterinarian has diagnosed chronic IBD, contact Cornell at vet-research@Cornell.edu.

May Is For Eyes. The Cornell University College of Veterinary Medicine Ophthalmology department is one of the many American College of Veterinary Ophthalmologists participating in the free eye exams to service and working animals program. Each May, these board-certified ophthalmologists provide over 7,500 working animals a free exam. You can learn more at acvoeyexam.org. ■



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