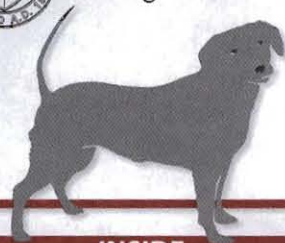




Cornell University
College of Veterinary Medicine



DOG Watch

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

Vol. 18, No. 3 ♦ March 2014

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Images of the brain showed dogs' positive response to trainers' hand signals.

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Its wide-ranging signs mimic other diseases and can cause complications.

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A 1-year-old Standard Poodle barks nonstop before and during playtime.

IN THE NEWS ...

A Single Injection Eased the Pain of Bone Cancer

Typical treatment for severe pain in late-stage bone cancer includes narcotics, steroids and palliative radiation — all with potentially negative side effects. However, researchers at the University of Pennsylvania School of Veterinary Medicine have found that a single spinal injection of neurotoxin can ease a dog's pain.

A portion of neurotoxin called P-saporin (SP-sap) attaches to a pain-sensing nerve, moves inside and destroys it. Within six weeks of receiving the injections, 26 of 35 dogs experienced significant improvement. Twenty-six other dogs in a control group given standard treatment had no change in their pain, and their owners were offered the injections.

The dogs in the study, published in *Anesthesiology*, were purebreds and mixes 8 to 9 years of age, weighing an average 90 pounds.

Neurotoxins can cause disease, but its properties are being applied in positive uses. In this case, researchers at Penn hope the relief SP-sap provided dogs could also be effective for humans. ♦

Lameness Isn't a Normal Part of Aging

Hindquarter weakness can be the first sign of a serious disorder of the muscles, bones, nerves, thyroid or brain

Have your elderly dog's rear legs sunk to the floor while he's standing? Has he fallen when walking, struggling to keep his rear upright? Hindquarter weakness, known as posterior paresis, is common in seniors. "About 40 to 50 percent of dogs experience hindquarter weakness as they get older," says surgical specialist Oliver D.E. Morgan, VMD, at Cornell University Veterinary Specialists in Stamford, Conn.



DR. WILLIAM H. MILLER

In addition to lameness, vestibular disease can cause tilting of the head.

The condition isn't a normal part of aging, however. It may be the first obvious sign of a long list of potential, often serious disorders of the muscles, bones, nerves or even the thyroid or brain.

Pain Develops. "Weakness is often associated with pain that causes decreased muscle use and thereby atrophy resulting in weakness," says Dr. Morgan. "The bigger issue is differentiating benign causes from more malignant — less

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How Anatomy Shapes Dogs' Sight

Their vision is less focused than ours and limited in color, but excellent at night with a far wider visual field

If you suspect your dog sees the world differently, you may be right. The complex anatomy of a dog's eye results in less focused vision than ours, and he likely sees only a limited range of colors. On the other hand, dogs boast superior night vision, and, with their eyes on the sides of the head, they have a 240-degree binocular visual field, compared to our 200 degrees.

Dogs have "low-resolution vision" when compared to people because they have a proportionately a lower number of what are called cone cells in their retinas — the light-sensitive layer at the back of the eye. The cone cells help make images sharp.

"The tradeoff is that dogs generally have better night vision than people do because their cone cells and their counterparts the rod cells are distributed differently than in humans," says ophthalmologist Seth Eaton, VMD, DACVO at Cornell University Veterinary Specialists in Stamford, Conn. "We believe it may represent an evolutionary advantage to dogs, historically affording them better night vision for hunting."

No Eye Charts. Of course, dogs can't read eye charts, so it's difficult to know exactly how well they see, but estimates range from 20/50 to 20/150. That means that, what a person can see in detail at 50 feet or

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DOG Watch

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SHORT TAKES

Brain MRIs Reveal Positive Response

Researchers at Emory University last year used magnetic resonance imaging to record brain images of two dogs who were not restrained for the procedure. Now they've used MRIs on the first two unrestrained dogs and 11 more to show positive brain response to hand signals that indicated whether they would receive a hot dog treat.

Eight of the dogs to receive the treat showed a positive response in the caudate, a structure between the brain stem and cortex with a high concentration of dopamine receptors. The receptors are instrumental in memory, mood, cognition and pleasure.

"We know that in humans, the caudate region is associated with decision-making, motivation and processing emotions," says Gregory Berns, MD, Ph.D., director of Emory's Center for Neuropolicy and lead researcher of the study published in the journal PLOS One.

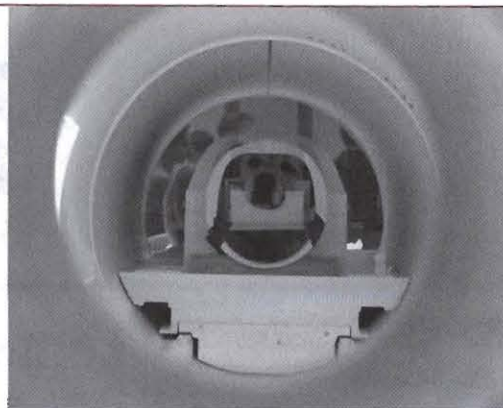
Eleven of 17 humans involved in an earlier experiment showed a positive response in the caudate similar to the dogs', Dr. Berns says. "Ultimately, our goal is to map out canine cognitive processes ... What we learn about the dog brain may also help us understand more about how our own brains evolved."

Dr. Berns stirred controversy with a follow-up essay in The New York Times. He said based on his research, the same brain region responsible for positive emotions in humans was also activated in dogs, and since we share similar emotions, we should rethink how we treat them, adding, "Perhaps someday we may see a case arguing for a dog's rights based on brain-imaging findings. Dogs are people, too."

You can watch videos of trainers in the study acclimating dogs to the MRI's confinement and noise at www.youtube.com/watch?v=F6C_3urmsJ0. One big challenge they encountered: keeping the dogs from wagging their tails.

Heartworm Drug Shortage

The Food and Drug Administration has asked veterinarians in the U.S. to conserve the limited supply of Immiticide (melarsomine dihydrochloride) to treat heartworm by using it only for dogs "in most urgent need of treatment."



HELEN BERNIS

As part of Emory University research on brain MRIs, Zen, a Labrador Retriever, has been trained to place his head in a custom-fitted chin rest inside a human neck coil. The photo was taken through a tube in the wall of the magnet room because the magnetic field would otherwise damage the camera.

The FDA will allow the maker Merial to import limited quantities from the company's European supplier to ease the ongoing shortage of the drug in this country. A small amount of U.S.-manufactured Immiticide is available, but the quantity the European supplier can send and that the U.S. supplier recently manufactured will satisfy only a fraction of the demand.

Heartworm infection has been found in dogs in all 50 states, according to the American Heartworm Society. Signs of heartworm infestation include exercise intolerance, a deep cough, weight loss, rapid breathing and blockage of a blood vessel, leading to collapse and death.

"All dogs in all regions should be considered at risk, placed on prevention programs and frequently examined by a veterinarian," the society says.

Reading Wagging Tails

Researchers at the University of Trento in Italy monitored the reactions of dogs watching videos of other dogs wagging their tails with either left- or right-asymmetric tail wagging.

When dogs saw another dog wagging to the left, their heart rates picked up and they began to look anxious. When they saw another dog wagging to the right, they remained relaxed. Researchers say the findings, reported in the journal Current Biology, suggest that dogs, like humans, have asymmetrically organized brains, with the left and right sides playing different roles. ♦

Lupus: The Great Pretender

Its wide-ranging signs mimic many other diseases, and left untreated, it can cause serious complications

Imagine this scenario: Unsightly inflamed and crusting skin starts to appear on a dog's face, the tips of his ears and pressure points such as toes, footpads and elbows. His fever persists despite antibiotics. His legs are stiff, and urination has increased. What could it be?

It might come as a surprise to those of us who believe only people get lupus, but the dog in question could indeed have the disease. His owner likely doesn't know it because lupus can mimic many other diseases and systemic drug reactions. Dermatologist William H. Miller, VMD, Medical Director of the

Cornell Companion Animal Hospital, calls lupus the great pretender.

Formally named systemic lupus erythematosus (SLE), the multisystemic immune-mediated disease causes the pet's immune system to essentially fight itself. In normal dogs, white blood cells help protect them from harmful substances — antigens like bacteria, viruses and toxins. The healthy immune system unleashes antibodies that destroy antigens. In dogs with lupus, the immune system can't distinguish between healthy tissue and foreign antigens, and destroys normal tissue.

True lupus is rare in dogs, though some believe that SLE may be somewhat under diagnosed. Still, Dr. Miller says, "Drug reactions are common — SLE is not." Because the signs of lupus resemble other diseases, however, owners should take their pet for a veterinary exam for diagnosis and treatment as soon as signs emerge. If untreated, autoimmune diseases can cause serious system-wide complications.

"Many other conditions that can be cured, like Lyme disease, can look like lupus. The diagnosis of lupus can be made only after an extensive, and therefore usually expensive, evaluation," Dr. Miller says.

Lupus is discounted or diagnosed in a clinical and laboratory evaluation, including a urinalysis and a tick-borne disease panel. If the dog lives where he may have been bitten by a female sandfly, giving rise to a disease called leishmaniasis, he'd also be tested for that disease.

The onset of lupus can be slow and insidious — or apparently sudden. In that case, the disease actually has been progressing before owners noticed that their dog is sick, Dr. Miller says. It takes time for tissue damage to reach a level where the organ can't function effectively. Some lupus conditions, such as widespread cutaneous lupus and discoid



DR. WILLIAM H. MILLER

Lupus can cause crusting on the face, ears, toes and footpads.

lupus erythematosus, affect the skin but not internal organs.

No one knows what causes lupus, although ultraviolet light may be one of many factors involved. In humans, genetics and viral infections also are thought to play a role. Several studies suggest that pets of human lupus patients may be at higher risk of acquiring lupus, but Dr. Miller doubts the findings. "I do not believe there is clear and convincing evidence of that association."

No cure is in sight. "Any version of lupus is incurable," Dr. Miller says, "but can be controlled with medications of varying potency and toxicity." Lupus usually is treated with immunosuppressive treatments for life. The drugs and their doses depend on the disease's severity. For example, a dog with a type of anemia called hemolytic anemia as a result of lupus is likely to die very quickly, Dr. Miller says, so he will be treated with high doses of one or more potent drugs.

"If a steroid has to be given daily at high doses, steroid side effects will shorten the patient's life," Dr. Miller says. Also, animals with severe anemia or thrombocytopenia (low platelet counts, which can also accompany lupus) "may die despite vigorous treatments."

Dogs with mild skin disease, arthritis or other less severe symptoms typically can go into remission, Dr. Miller says. If a low dose of a steroid such as prednisolone given every other day proves effective, then the dog usually can do well for long periods of time. ♦

ADDITIONAL SIGNS OF LUPUS

The cause of lupus in humans is unknown, as it is in canine lupus. While the Mayo Clinic says the disease seems to most often affect women, especially those of African American, Hispanic, Asian and Native American descent, gender doesn't appear to play a role in dogs.

In addition to the symptoms discussed elsewhere on this page, other prominent signs of canine lupus include:

- ◆ Anemia
- ◆ Arthritis in five or more joints
- ◆ Renal disorders
- ◆ Abnormal behavior such as aggression
- ◆ Lack of appetite and weight loss
- ◆ Diarrhea
- ◆ Thinning of the skin
- ◆ Increased respiratory rate
- ◆ Dehydration

VISION... *(continued from the cover)*

even up to 150 feet, dogs can see well only at 20 feet. "I always tell owners that it doesn't mean that you should be worried that your dog isn't seeing well and needs glasses," Dr. Eaton says. "Their visual acuity is dependent on a lot of different factors."

The general blueprint for the anatomy of the eye is much the same for dogs and people, he says. All mammals have a cornea — a clear window in the front of the eye — as well as a lens that sits roughly at the middle of the eye and provides focus. The most important structure we all have for vision is at the back of the eye — the retina, a membrane made up of hundreds of thou-

sands of tiny cells that are responsible for generating the images that we see.

Dr. Eaton fields many queries from pet owners puzzled about canine vision. He takes some of the mystery out of the topic here.

Can Dogs See Colors?

While humans normally see a wide range of colors, dogs appear to see a more limited spectrum. Dogs are thought to be akin to people with typical color blindness, Dr. Eaton says, and they likely have trouble differentiating red and green. That's because of the difference in the canine retina, specifically in the pigments within the retinal cells. Dogs have only two types of pigments in their retinal



BIGSTOCK

What we see in detail at up to 150 feet, dogs see well only at 20 feet.

cells. Humans with normal color-seeing ability have three different types. Dogs enjoy a little bit less vivid color spectrum, Dr. Eaton says, "but we know that they have the capacity to see color."

Can Dogs Be Nearsighted?

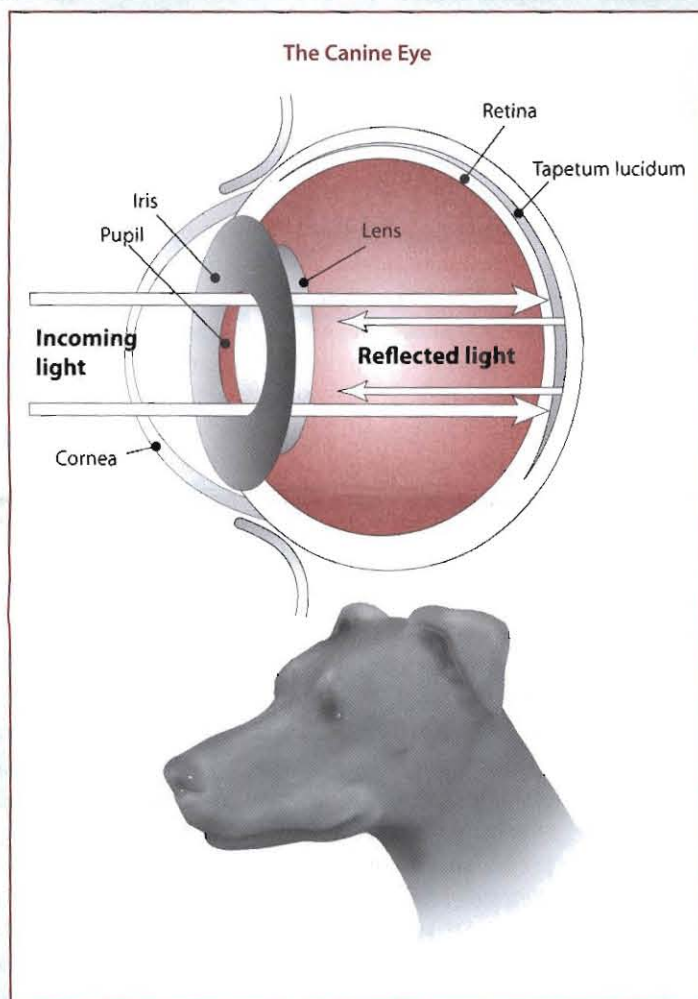
While the vast majority of dogs aren't nearsighted — in which distant objects appear blurred — some breeds have been shown to have a higher risk, including the Toy Poodle, English Springer Spaniel, Collie, Rottweiler and Miniature Schnauzer. "In almost all cases, we would never know it," says Dr. Eaton. "They compensate very well."

Nearsightedness increases with age across all breeds, according to a study of 1,440 dogs published in the American Journal of Veterinary Research. The same study found some breeds are more farsighted — having the ability to clearly see objects at a distance. They include the herding dogs Australian Shepherd and Bouvier des Flandres.

The same study found German Shepherd Dogs were somewhat prone to astigmatism, an imperfection in the curve of the cornea, causing blurred

A GLOSSARY OF THE EYE'S ANATOMY

- ◆ **Cornea:** The transparent coating of the eyeball that admits light.
- ◆ **Iris:** Its colored anterior surface determines the eyes' color.
- ◆ **Lens:** Provides focus.
- ◆ **Pupil:** The opening at the eye's center that lets in light. It shrinks in bright light and enlarges in darkness.
- ◆ **Retina:** The membrane whose tiny cells are responsible for generating images.
- ◆ **Tapetum lucidum:** The iridescent, light-reflecting layer of tissue behind the retina reflects light known as "eyeshine." It enhances night vision and is responsible for dogs' eyes' glowing in the dark or a camera's flash.



MARTY BEE

vision. They also were likelier to have anisometropia, meaning their two eyes have unequal refractive power.

My Dog Has Gone Blind — What Now?

In reality dogs adapt to vision loss quickly, even when it's sudden. Owners' efforts and veterinary advice can help the transition. "Dogs are incredibly adaptable and live great quality of life with their vision impairment, regardless of the underlying cause," Dr. Eaton says.

Surprisingly, blindness in some cases is reversible. A number of factors can

cause blindness in dogs, including eye inflammation, glaucoma, cataracts and even inherited diseases that cause retinal problems.

"What I think is important for owners to know," Dr. Eaton says, "is before assuming that it's an unfixable problem, as many owners might understandably do, they probably should consult with their veterinarian or a veterinary ophthalmologist because in some cases, such as inflammatory conditions of the eye(s) or cataracts, those problems can be identified and medically treated or fixed."

Do Dogs Get Macular Degeneration?

No, dogs don't have a macula — a small yellow spot in the center of the retina — so they don't experience a loss of vision in the center of their visual field, as can humans who develop age-related macular degeneration.

Best Advice for Healthy Vision

"Some conditions like cataracts occur mainly at the microscopic level," Dr. Eaton says, "so it's important to have your veterinarian check your dog's eyes for subtle changes during annual exams or when you suspect a problem." ♦

SIGNS OF DISEASE SHOULD BE ADDRESSED SOONER RATHER THAN LATER

When a dog squints and paws at red, irritated eyes, it's sleuthing time for a veterinarian. Symptoms can be the same in a variety of eye diseases ranging from infection to dry-eye syndromes to potentially sight-robbing glaucoma.

"All of those diseases can produce similar kinds of signs, so it's important for owners to know what they are but also to know that it's something that should be addressed sooner rather than later to prevent a more serious problem that could be painful and vision-threatening," says ophthalmologist Seth Eaton, VMD, DACVO, at Cornell University Veterinary Specialists.

Glaucoma is a condition of increasing pressure within the eye. "Untreated, it can progress quickly, resulting in potentially permanent vision loss," Dr. Eaton says. "Getting that pressure under control as soon as possible is the best way to maintain vision and not unfortunately end up with an eye that is permanently blinded." The common maladies that Dr. Eaton sees in dogs:

DRY-EYE SYNDROME

Signs and cause: The tear glands don't adequately produce tears, prompting a discharge from dry, inflamed eyes. Some breeds are more prone, such as English Bulldogs and American Cocker Spaniels, though any dog can get dry eye (a.k.a. keratoconjunctivitis sicca). Causes may include reactions to sulfa antibiotics or surgical removal of the third eyelid gland(s).

Treatment: Cyclosporine solution or ointment and possibly artificial tears; depending on the case, topical antibiotics, corticosteroids or even surgery may be necessary.

Prognosis: Medication likely for life. Prognosis is favorable with consistent care; if not, signs can lead to recurring conjunctivitis, corneal ulcerations and blindness.

CATARACTS

Signs and cause: Cataracts produce a cloudy, whitish appearance to the eye, often visible only in certain light or in a photograph of your dog. About 60 breeds have a genetic predisposition, including the Bichon Frise, Boston Terrier and Poodles. Diabetes is the next most-common cause: 75 percent of dogs develop cataracts within a year of a diabetes diagnosis, Dr. Eaton says.

Note: If the lenses of your older dog's eyes have taken on a smoky blue appearance, that's not necessarily a sign of cataracts. It may be nuclear sclerosis, a natural age-related hardening of the lens that doesn't require surgery.

Treatment: Surgery very similar to human cataract surgery.

Prognosis: Surgery success rates for the best candidates exceed 90 percent. The sooner cataracts are identified as problematic, the better the outcome.

"The old belief that letting a cataract ripen or really become more mature until it's considered a candidate for surgery is no longer standard practice," says Dr. Eaton.

CORNEAL ULCERATION

Signs and cause: Just like a wound on the skin, a corneal ulceration is an erosion of the surface of the eye, possibly due to scratches, dry-eye syndrome or eyelids that roll inward. Any dog can develop them, but some, such as the Shih Tzu, Boxer, Pug and Bulldog, may be more vulnerable.

Treatment: Topical antibiotics, treatment of the underlying cause, possibly surgery.

Prognosis: Good with medical care. Untreated ulcerations can become infected and lead to blindness.

LAMENESS ... (continued from the cover) treatable — causes such as degenerative myelopathy.”

Posterior paresis may sneak up on your dog. But it's just as likely he'll be normal one day and then unable to control his hind limbs without difficulty the next. You may notice a constellation of other symptoms, too. Providing your dog's veterinarian with a list of all the signs can lead to diagnosis and treatment that improves strength and reduces discomfort. Here are some of the many different causes of posterior paresis.

Degenerative Disease

Causes: Chronic, progressive breakdown of body parts, such as bone, muscles, ligaments and nerves. Osteoarthritis, which affects the joints, is a common example.

Onset: Originates slowly, unless a ligament tears or disk suddenly ruptures.

Tests: X-rays but a CT or MRI may also be needed.

Treatment: Varies widely from surgery to repair of the ligaments to replacement of hip or knee joints and physical therapy, and acupuncture to provide “comfort care.” Medical management includes weight loss, exercise regulation, drugs to reduce inflammation and pain, and nutraceuticals such as glucosamine to promote joint health.

Prognosis: When a joint is surgically replaced, stable rear function usually returns. But aging often encompasses degenerative diseases that can be only delayed or slowed.

Neurologic Disorders

Causes: Strokes, decline in cognitive function, atypical seizures or impaired blood flow. Old dog vestibular disease — a disorder of the nerve connecting the inner ear to the brain — can cause dizziness, head tilting and hind weakness. Breeds prone to vestibular disease include the German Shepherd Dog, Doberman Pinscher, Akita, English Cocker Spaniel and Beagle.

Onset: Gradual but can be as short as a few days.

Tests: Brain imaging seldom reveals sufficient information. Blood and urine

analysis, and imaging studies can help rule out or determine other causes.

Treatment: Aimed at the underlying cause. It could include aspirin, anipryl for cognitive dysfunction or anti-seizure medications.

Prognosis: Symptoms may be managed for a time. Normal function returns after vestibular disease resolves, but weakness tends to worsen.

Tumors

Causes: Neoplasias — cancers or growths — and pressure on the spinal cord, nerve sheaths or nerves. Tumor types are determined by location and cell structure. Examples include osteosarcoma, lipoma, meningioma (a generally benign brain tumor) and fibrosarcoma. Breeds prone to fibrosarcoma include Gordon Setters, Irish Wolfhounds, Brittany Spaniels, Golden Retrievers and Doberman Pinschers.

Onset: “People may assume that spinal tumors show up slowly, but at least 75 percent of cases have an acute, or sudden, onset,” Dr. Morgan says.

Tests: X-rays. MRI for diagnosis of location and size.

Treatment: Tumor type is determined by a biopsy performed under general anesthesia. If possible, the tumor is removed at the same time. Radiation therapy is used to eliminate remaining malignant cells. With bone tumors, veterinarians prescribe drugs for pain control and bisphosphonates to reduce loss of bone mass.

Prognosis: Depends on tumor type, location and invasion into surrounding tissues. Lipomas — tumors consisting of fat — are usually benign, although they may regrow. However, malignancies may return quickly or be inoperable and quality of life may be poor.

Vascular Conditions

Causes: Problems in the circulatory system, such as blockage from blood clots or impaired blood flow. One example is a fibrocartilaginous embolism, also called spinal cord stroke, which occurs when the gel-like cushion between vertebral discs moves into the spine and blocks blood flow.



When your dog develops hindquarter weakness, providing his veterinarian with a list of all the signs can lead to diagnosis and treatment to improve strength and reduce discomfort.

Onset: Sudden but can show up intermittently. May follow an accident. Giant breeds may be more predisposed.

Tests: Diagnosis is based on medical history. A spinal myelogram — a dye-enhanced X-ray (CT scan) — can rule out other diseases or tumors, but a magnetic resonance imaging study can be definitive.

Treatment and prognosis: They depend on the primary problem. Aspirin or steroids may help certain conditions. Recovery from FCE may take several weeks to a few months. The outcome is more favorable when the dog has feeling in the rear legs.

Nutritional Reasons

Causes: Vitamin or mineral deficiencies and imbalances of electrolytes like potassium, calcium or sodium. Malabsorption — an inability to absorb and utilize nutrients — malnutrition or diseases that cause an excess loss or accumulation of electrolytes affect how muscles move or their mass is maintained.

Onset: Comes on slowly and worsens over time.

Tests: Blood work to determine nutrient levels and function of organ systems that affect these levels.

Treatment: Nutritional supplements, possibly with a therapeutic diet. Treat and monitor the original problem.

Prognosis: Depends on correcting the underlying issue. It should improve gradually if identified early and optimal nutrition can be maintained. Some atrophy may be permanent.

Bacterial and Other Infections

Causes: Bacterial, viral or fungal infections of the spine or nervous system, such as meningitis or ear infections. Also, toxins produced by infectious agents like tick paralysis and botulism.

Onset: Usually rapid.

Tests: Blood work to check white cell counts or specific infections. X-rays, a CT scan, MRI and even a spinal tap may all be necessary.

Treatment: Antibiotic, anti-viral or anti-fungal drugs, possibly anti-toxins. Management may include IV fluids, bed rest, pain medications and steroids.

Prognosis: Some cases have a guarded outlook. Relapses may occur, but most dogs recover in several weeks to a few months.

Endocrine/metabolic Disease

Causes: Dysfunction of the adrenal, parathyroid and thyroid glands. Sequelae — the results of the disease — include low circulation, disturbed electrolyte balance, impaired carbohydrate metabolism as in diabetic neuropathy where nerves controlling rear legs become inflamed, muscle fiber malfunction or toxic levels of a dog's own hormones. Endocrine function changes with age, predisposing older dogs to resulting weakness. Females tend to be affected more often.

Onset: Slow and progressive or sudden, depending on the glands involved, or if there is a tumor of an endocrine gland.

Tests: Imaging. Blood and urine analyses to check endocrine hormone levels.

Some tests require the administration of synthetic hormones to check responses.

Treatment: Surgery to remove endocrine tumors, medications to replace low levels of hormones or suppress over-production. Beta-blockers, drugs routinely used in humans to treat hypertension, may improve muscle strength.

Prognosis: Depends on correcting the underlying disorder. Recovery can be prolonged and partial weakness may continue.

Iatrogenic, or Medically Induced

Causes: Side effects of some drugs, including the steroid prednisone and tramadol for pain relief.

Onset: May be rapid at time of medication administration or shortly after.

Diagnosis: Made on recent medical history.

Treatment: Stop causative drug. Some may need to be tapered off.

Prognosis: Varies, but normal hind-quarter function usually returns once the drug is eliminated.

Idiopathic — of Undetermined Cause

When a diagnosis can't be reached, treatment is aimed at maintaining comfort. Outcome depends on how rapidly the weakness progresses, its severity and quality of life.

Traumatic Reasons

Causes: Fractures due to nutrition- and age-related decline in bone health. This could include low calcium levels, fragile bones, slippage of spinal vertebrae or fractures of the spine or pelvis.

Onset: Sudden.

Diagnosis and Treatment: X-rays. Splints to stabilize the spine or surgical repairs are made. Pain control medications are prescribed. Physical therapy is useful in many cases, but recovery depends on the severity of the injury and ability to regain mobility.

"In the end, determining and treating the underlying cause is the best advice I can offer," Dr. Morgan says, "because there are many causes of hind limb weakness that can be cured or managed." ♦

LIVING WITH A LAME DOG

Posterior paresis changes your dog's daily life. Seniors with weak rears may also become incontinent. Stairs are difficult to climb safely and non-carpeted floors seem as slippery as ice. Getting onto or falling from an elevated bed is a hazard. Bending down to drink or eat may cause your dog to slide to the floor. Formerly enjoyable walks require extra effort.

To help your dog navigate these challenges:

- ◆ Use doggie diapers and waterproof bed covers.
- ◆ Buy a special sling to support him when he stands or goes up and down stairs.
- ◆ Install dog ramps and cover slippery flooring with non-slip rugs.
- ◆ Elevate bowls. Elevated bowls are associated with bloat, or gastric dilatation volvulus, in dogs, but probably because predisposed dogs are being fed from a height and then develop it, says surgical specialist Oliver D.E. Morgan, VMD, at Cornell University Veterinary Specialists. "Genetic and environmental factors other than the food height are more likely the cause of the bloat in my mind. Elevated bowls have never been proven as a cause but rather only an association."



A ramp can help lame dogs avoid falls getting on and off an elevated bed.



Katherine A. Houpt, VMD, Ph.D., here with her Carin Terrier, Denver, provided the answer on this page. Dr. Houpt is a diplomate of the American College of Veterinary Behaviorists and emeritus professor at the Cornell University College of Veterinary Medicine.

Please Share Your Questions
We welcome questions of general interest on health, medicine and behavior. We regret however, that we cannot comment on specific products and prior diagnoses. Please send correspondence to:

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COMING UP ...

CUSHING'S
DISEASE



NAIL INJURIES



WEIGHT
MANAGEMENT



MULTI-PET
HOUSEHOLDS

This 1-year-old Standard Poodle Barks Nonstop Before and During Playtime

Q Our black 1-year-old Standard Poodle will not stop barking when other dogs are around. It is specifically when my Grandpa's 3-year-old black Standard Poodle is here. We have tried spraying Bailey with water (she likes it), shaking pennies in a can and even a dog whistle. When we try telling her no, she starts barking at us.

Usually, she is fine when there are only two dogs, but when there are three, we have a problem. When the other two are playing and she feels left out, she barks up a storm, but when she gets the opportunity to play, she just keeps barking. Any suggestions on how to stop this or maybe some reasoning as to why she does this would be greatly appreciated!

A Black Standard Poodles are regal and intelligent animals. They rank fairly high on watchdog barking — territorial or intruder-directed barking — but only half of the breeds surveyed barked less, and therefore half barked more excessively.

Poodles rank very high on playfulness. These rankings are based on the opinions of obedience judges and veterinarians compiled by Drs. Ben and Lynette Hart of the University of California at Davis. Another Davis graduate, Dr. Sophia Yin, recorded dog barks and could classify them as intruder, play or isolation barking based on the frequency and duration of the barks.

Putting all this information together with your dog's history, I think your dog is highly motivated to play and is indicating that vocally. Barking does not take much energy, so she can produce many vocalizations before she is tired.

Before we discuss discouraging barking, we should try to reduce her motivation to bark. She probably needs a lot more playtime with other dogs her age and size. If you can't arrange more time with your family's dogs, you might consider doggie day care or a dog park if you have one available.

You can play with her, too, although probably not as much as another Poodle. She could also start doing agility to use up some of that energy

and enthusiasm. Of course, obedience training, at which Poodles excel, is absolutely necessary especially in practicing "Down." Dogs are a little less likely to bark when lying down.

You should try to teach her "Quiet." Don't try this when the other dogs (her play group) are present but at calmer times. Wait for her to stop barking say "Quiet" or "Shhhh" and pop a treat in her mouth before she can bark again. Don't say "No" because that almost sounds like a bark. You say "No." She says "Yap."

There are many ways to discourage barking from the water pistol, which you found ineffective, to bark-activated shock collars. Needless to say, I do not advocate shock collars. The shock collar that is most often misused is the kind that the owner controls with a remote. Most people have poor timing, so the dog is punished for going to the southeast corner of the yard rather than for barking. The bark-activated shock collars are better in that they punish the dog at exactly the right time — when she is barking. But even these can be cruel. I have seen several cases of burns on the dog's neck where a shock collar was fastened.

The last dog I saw whose problem was barking at the neighbor dogs had been fitted with a bark-activated shock collar. He stopped wanting to go outside as a result. You can try a citronella bark collar, which sprays citronella on the dog's chin when he barks or a relatively new product called Androstenol that has a boar odor. It is available as Stop That! from Sentry, at pet stores or in a stronger formulation as Interceptor from veterinarians.

I hope you will be able to reduce your dog's motivation to bark, by making sure she is not play-deprived and learns that stopping barking after a woof or two is rewarded rather than having to use pain or discomfort to diminish the behavior. ❖



Bailey would benefit from learning "Quiet" and "Down" in obedience training — Poodles excel at it.

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