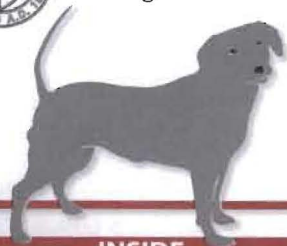




Cornell University
College of Veterinary Medicine



DOG Watch

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

Vol. 17, No. 5 ♦ May 2013

INSIDE

Short Takes 2

Cornell seeks Vizslas' DNA to study genetically mapping mast cell cancer.

The Peril of Hot, Closed Cars 3

Temperatures can spike even on a mild day, leading to heatstroke.

'An Itchy Dog Feels Miserable' 4

An infestation of parasitic mites can cause hair loss and infected sores.

Ask the Experts 8

A young Poodle struggles with house training to a litter pan and paper.

IN THE NEWS ...

Pacemaker placement determines its success

Although pacemakers have been an option for dogs since the '60s, some patients still develop congestive heart failure after pacemaker implantation. Evidence indicates pacemaker stimulation of the right side of the heart, a common site for placement, can harm the heart. Now University of Florida researchers are conducting a clinical trial to determine the ideal location for implantation. In most cases, cardiologists no longer implant pacemakers by opening the chest cavity. They usually insert the generator (with the battery and other devices) beneath the skin of the neck and the stimulating wires are passed through the jugular vein to the heart.

In the study of 23 patients, UF researchers have found placing the wires in the left side of the heart or on both the right and left simultaneously may be more successful. The technique was successful in dogs weighing more than 33 pounds but less so in smaller breeds, researchers say. ♦

Slowing Canine Cognitive Decline

Mental and physical exercise and antioxidant-rich diets often improve the quality of life for both owners and dogs

Advances in veterinary medicine are keeping our dogs alive longer, giving us precious extra years to spend with them. Sadly, extended lifespans also bring geriatric disorders such as canine cognitive dysfunction (CCD), similar to human Alzheimer's in its symptoms.

Like Alzheimer's, CCD has no cure. But drugs and special antioxidant-rich diets, in addition to mental and physical exercise,



First rule out other medical conditions.

often improve the quality of life for both owners and dogs.

Before any regimen is instituted, a thorough veterinary exam is essential. "No pre-mortem tests exist to determine whether a dog has the disease," says Katherine A. Houpt, VMD, Ph.D., former president of the

American College of Veterinary Behaviorists and emeritus James Law Professor of

(continued on page 6)

The Biggest Mistake in Giving Treats

It's failing to count their calories — giving a slice of cheese, for example, is equivalent to your eating seven slices

Treats provide welcome rewards for good behavior, but their overly generous use can lead to obesity. One reason is that owners often don't count treats as calories. "But the bigger problem is a multiple-person household in which every time someone walks by, they give the dog a treat," says Joseph Wakshlag, DVM, Ph.D., Associate Professor of Nutrition at the Cornell University College of Veterinary Medicine.

"Then they think, 'Wow, we went through treats pretty quick. Let's get another bag.' The solution is to put a certain number of treats in a container every day, and then don't refill it until the next morning."

Dr. Wakshlag gives the skinny on dog treats and more in this Q & A:

Q: Do all treats need to be nutritionally sound or can dogs have junk food once in a while?

A: It depends on who you talk to. Some treats are nutritionally sound, and a little bit of junk food is good for the soul, but treats should account for no more than 10 percent of daily calories.

Q: How can owners figure out that 10 percent of their dog's daily caloric intake?

A: Usually manufacturers have calories listed on the side of the bag. Consider the size of the dog. A medium-sized Milk Bone has 70 to 75 calories, the jumbo has 125, and the really small ones are about 20. Pig ears, pizzle sticks and rawhide tend to be higher in calories as

(continued on page 5)

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DogWatch® (ISSN: 1098-2639) is published
monthly for \$39 per year
by Belvoir Media Group,
LLC, 800 Connecticut
Ave., Norwalk, CT 06854-1631. Robert Englander,

Chairman and CEO; Timothy H. Cole,
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Postmaster: Send address corrections to
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SHORT TAKES

DNA Sought for Study of Mast Cell Cancer

A growing number of veterinary
research projects today focus on
identifying the genes that cause
diseases, and equally important,
how to prevent or cure them.

In one effort, the Cornell Uni-
versity College of Veterinary Medi-
cine is seeking DNA samples from
100 Vizslas to genetically map
mast cell cancer in the breed.
Working with the Vizsla Club of
America Welfare Foundation, Cor-
nell veterinarians say the goal is
to develop a genetic test to allow
owners and breeders to detect
their dogs' susceptibility to this deadly dis-
ease before making breeding decisions.

Dogs diagnosed with mast cell cancer are
needed, as well as non-affected Vizslas who
will be in a control group. Breeders and own-
ers would work with primary care veterinar-
ians to collect and submit samples. Dogs in
the control group must be at least 8 years old
and free of the disease.

Cancer is consistently in the top 10 con-
cerns breed clubs report to the Canine Health
Foundation, says Marta Castelhan, DVM,
Research Associate with the Medical Genetics
and Pediatrics Service at the Cornell Universi-
ty Hospital for Animals. "The late onset of the
type of skin cancer we are studying — mast
cell tumor — means that, most of the time,
clinical detection of the cancer doesn't occur
until the dog has been bred."

Mast cell tumors account for approxima-
tely 20 percent of skin tumors in dogs, accord-
ing to Cornell. The tumors vary in appearance
from single lumps or masses to ulcerated
lumps. The cause is unknown.

DNA blood samples in the Vizsla project
will be added to Cornell's Medical Genetics
DNA Bank, a resource for clinicians and pre-
clinical scientists around the world. "Research-
ers will be able to use the genetic material
to develop better diagnostic methods, more
effective treatments and new drugs for other
conditions," Dr. Castelhan says.

To participate in the study, please email
dnabank@cornell.edu. For more information:
www.vet.cornell.edu/research/dnabank/. For



The Vizsla is known as a dual dog — capable of power and
endurance in the field and affection at home.

BIGSTOCK

information on the Vizsla Club of America
Welfare Foundation: Look under the heading
"Welfare" at <http://vcaweb.org>.

CHF also seeks DNA

The AKC Canine Health Foundation is also
asking for participation in studies, announcing
that, "You and your dog may be able to help
move research forward by providing a DNA
sample or enrolling in a clinical trial."

Unlike DNA samples, which involve little
more than a draw of blood, enrolling in a
clinical trial brings a commitment to follow
through on therapies and testing, the CHF
says, adding that, "The benefits can include
access to cutting-edge medicine and the
chance to help future generations of dogs."

The foundation's requests for participation
include:

- ◆ DNA samples from cleft lip/palate-affected
dogs and relatives.
- ◆ DNA samples from Boxers and French
Bulldogs with granulomatous colitis and
healthy Boxers and French Bulldogs.
- ◆ A clinical trial for dogs with immune medi-
ated polyarthropathy, a joint condition that
can cause systemic illness and cartilage,
and bone destruction.
- ◆ A clinical trial for experimental therapy to
prevent diabetic cataracts.

The CHF is also asking for blood and
urine samples from dogs with leptospirosis.
A complete list of studies needing participa-
tion is available at www.akcchf, using the
keyword "participation." ◆

The Peril of Hot, Closed Cars

Temperatures can spike even on a mild day, leading to heatstroke

Summer offers the promise of shared fun — outdoor games, longer walks, romps on the beach — but high temperatures can also put your dog at risk for threats to his health. The most serious is heatstroke, says Gretchen Schoeffler, DVM, Section Chief of Emergency and Critical Care at Cornell's Hospital for Companion Animals.

"Heatstroke is usually due to excessive or even moderate exercise in a poorly conditioned dog, or it can be due to an excessively hot environment — a closed car is classic."

The Critical Elements. A dog's chances of survival: "It depends on how severely he is affected and the length of time to treatment," Dr. Schoeffler says. Time and temperature are the critical elements when a dog is in a closed car. When it's 75 degrees outside, it takes only 10 minutes for the temperature inside to reach 94 degrees. Ten minutes later, the interior temperature can reach 104, according to a study by Stanford University and meteorologist Jan Null, a lecturer in extreme weather at San Francisco State.

"The study shows that vehicles can very rapidly reach life-threatening temperatures even on mild days," Null says. While the atmosphere and car windows

are relatively transparent to the sun's shortwave radiation and warmed little, the energy can heat objects, the study found, adding that a dark dashboard or seat can reach 180 to over 200 degrees. (The study, published in the journal *Pediatrics*, concerned the death of children left in hot cars.)

Puppies, geriatric and dark-coated dogs are especially vulnerable to heatstroke. "Some breeds are also predisposed — those who cannot dissipate heat as efficiently, for example, brachycephalic breeds," Dr. Schoeffler says. These short-nosed dogs include Bulldogs, Pugs, Pekingese and Boston Terriers.

"Overweight or poorly conditioned dogs are also predisposed, as are dogs with diseases that impair their ability to dissipate heat, such as heart disease, laryngeal paralysis and tracheal collapse," she says.

Dogs are at a disadvantage in warm weather. They cool themselves by panting and, to a lesser degree, by sweating through their footpads. Their normal temperature ranges between 101 and 102.2 degrees Fahrenheit. If their temperature reaches 106 degrees and higher, however, multiple organ failure can develop, resulting in death.

If left untreated, the early signs of overheating such as heavy panting,

rapid heart rate, drooling and lethargy may progress to full-blown heatstroke. Some of the classic signs are obvious and constitute a medical emergency:

- ◆ Weakness
- ◆ Vomiting
- ◆ Disorientation and dizziness
- ◆ Diarrhea that may contain red blood
- ◆ Tremors

In addition, a dog may have bright red gums and eyes, and exhibit spontaneous bruising on the inside thighs, gums, ears and abdomen, Dr. Schoeffler says. In some cases, a dog will collapse and go into a coma. If you're worried your dog is overheated, you should douse him with tepid, room-temperature water — not cold — and seek immediate veterinary care.

Prompt, aggressive treatment at the clinic can include lowering the core body temperature, giving fluids to correct inadequate circulating or blood volume, and managing secondary complications.

Guarded Prognosis. The prognosis for heatstroke varies and depends on the duration of exposure, rapidity of treatment and maximal core body temperature achieved, as well as the presence of

pre-existing conditions and development of complications.

The most important advice for owners: "Pay attention to your dog," Dr. Schoeffler says. "When he sits or lies down to take a break, do not coax or encourage him to keep going. Always have water available — port it when hiking or away from home. And never leave your dog unattended in the car or other such space." ♦

Estimated Vehicle Interior Air Temperature v. Elapsed Time

Elapsed Time	Outside Air Temperature (F)					
	70	75	80	85	90	95
0 minutes	70	75	80	85	90	95
10 minutes	89	94	99	104	109	114
20 minutes	99	104	109	114	119	124
30 minutes	104	109	114	119	124	129
40 minutes	108	113	118	123	128	133
50 minutes	111	116	121	126	131	136
60 minutes	113	118	123	128	133	138
> 1 hour	115	120	125	130	135	140

JAN NULL, GOLDEN GATE WEATHER SERVICES

'An Itchy Dog Feels Miserable'

An infestation of parasitic mites can cause hair loss, dandruff and infected sores, and also be contagious

Dogs with mange look scruffy, with missing patches of hair or oozing sores where they've scratched or bitten themselves trying to tame the itch. But mange is more than unsightly. "An itchy dog feels miserable," says William H. Miller, VMD, Medical Director of the Cornell University Hospital for Animals. What's more, the disease can cause skin conditions ranging from dandruff to hair loss to infected sores.

The types of mites that cause problems in dogs are *Demodex*, *Sarcoptic* (scabies), *Cheyletiella* and *Otodectes* (ear mites). The type a dog contracts depends on genetics, immune health, environment, preventive treatment and contact with infected animals.

For instance, the cigar-shaped *Demodex* mites, which can't be seen by the naked eye, live normally in hair follicles. They cause problems only when they multiply because the immune system is weak or abnormal. A genetic basis for *deodectic* mange exists in many dogs.

Spread By Contact. Scabies, ear mites and *Cheyletiella* are contagious. They spread through contact with an infected animal or environment. "Most mites die off in the environment within 24 hours, but they could last longer in dens and bedding," Dr. Miller says.

Dogs can spread scabies to each other, people and other animals such as cats, although this is uncommon. Scabies is common in areas with foxes and coyotes. Domestic dogs don't play with their wild cousins, but if they find the den of an infested fox or the body of a fox or coyote that has died of the disease, they can pick up the mites through contact.

Some mites move between species. *Otodectes* are most common in cats (especially kittens), but they're spread

by contact and can take up residence in a dog's ears. *Cheyletiella* can also be transmitted between species. Products that kill fleas and ticks keep this mite under control, so the frequency of the disease has decreased. Dogs on a sound flea-preventive program with a product that kills both fleas and ticks should not have problems with *Cheyletiella*.

A New Species. *Demodex injae*, a new species of hair follicle mite, causes skin to be itchy and greasy on the face, feet and body. It's sometimes mistaken for an allergy. *Demodex canis* causes itching, hair loss and pustules. Signs may be limited to the head, neck and ears, known as localized demodicosis. "True localized demodicosis typically is a self-curing disease that isn't too much of a big deal," Dr. Miller says.

Generalized demodicosis is a bigger concern. It has two forms. The adult form is usually triggered by a serious underlying metabolic or neoplastic (abnormal mass) disease. Dogs with the juvenile-onset form may have a genetic predisposition. "It tends to occur in certain purebred dogs more often than mixed breeds," Dr. Miller says. "The breed predisposition can vary depending on the part of the country you're in, but the Bulldog, Pit Bull and various terrier breeds are seen across the country."

Dogs with juvenile-onset demodicosis shouldn't be bred to prevent passing the tendency to puppies.

Tormenting Itch. Signs of scabies are severe itching on the head, neck or front feet, hair loss, and red, raw or crusty skin. Affected dogs will scratch, lick or bite until the fur comes off in patches. They may have difficulty sleeping through the night because they're tormented by the itch.



WILLIAM H. MILLER, VMD

An Elizabethan collar prevents this dog being treated for a severe case of mange from scratching himself.

Suspect *Cheyletiella* if your dog itches or has dandruff along his spine, where mites tend to feed. He may have a dark-brown discharge that fills the ear canal. We think of *Otodectes* as an ear disease, but the mites can live and feed outside the ear, in rare cases causing signs elsewhere on the body.

In severe cases of any infestation, itching is so intense dogs can't get any relief. They may lose weight from constant scratching or biting at the skin, or develop painful, crusty sores from the self-inflicted wounds. Bacterial infections of the sores can be a complicating factor.

When treating generalized demodectic mange, medicated shampoos and dips can help but take up to a year to be effective. The coat may need to be shaved or clipped to ensure the medication reaches the skin effectively.

Treatment for most other mites is easy and quick, Dr. Miller says. Dips, drops or topical treatments kill the mites. After taking a skin scraping and examining it microscopically to identify the type of mite, the veterinarian will choose the treatment based on the mite's species, your dog's age, and any other health issues he may have. In most cases, the problem resolves within a month. ❖

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

well as in fat and protein. A small rawhide chip has 70 calories, and it's over 200 for the big rawhide with a knot on each end. That's a lot of calories. If you give a big one to a 45-pound dog, it's a quarter of the daily caloric intake.

Q: Is rawhide acceptable for dogs?

A: Not from a strict veterinary viewpoint, but in all reality very few dogs choke on them every year compared to the number consumed.

Q: Are organic treats preferable?

A: There is no proof that organic does anything for you except cost more. Because the foods made from organic vegetable and fruit sources tend to be smaller, they can be a bit more nutrient dense. Organic is more about exposure to pesticides than nutrition.

Q: What fat percentage is acceptable for dogs?

A: Stick with the calorie percentage rather than the fat. The higher the fat, the higher the calories.

Q: Are there any ingredients to avoid?

A: Yes. Toxins, raisin, grapes, avocado, onions and garlic should be avoided. It's the table foods people don't think about. Let's say you give your Cocker Spaniel a slice of cheese with a pill. For him, that slice of cheese is equal to your eating seven of them. I have not checked the calories in Greenie's Pill Pockets, but it's the same principle and they are better for your pet than cheese.

Q: What, if any, treats should be avoided?

A: Bones can cause dental problems, as they can fracture teeth. Also, if the dog eats an entire pig knuckle, it doesn't pass very well.

Q: Should vegetables be steamed because of dogs' shorter gastrointestinal tracts or is raw OK?

A: We should cook vegetables to some degree to liberate the nutrition in many cases. Raw vegetables don't have any advantage except that they may not be quite as calorie dense. For ease of preparation, using canned or frozen vegetables is a great option for weight loss. Vegetables are typically bulky and have fewer calories than traditional treats. As far as treats, some dogs go crazy for vegetables.

Q: What treats do you give your dogs?

A: My dogs get Greenies sometimes, the dental chew rawhide treats and occasionally sweet potato jerky. I've not fed my pets any jerky from China — why risk it? Nobody can identify the problem with Chinese jerky treats, but toxicologists have been working on it. [While the FDA hasn't confirmed a link between chicken jerky treats from China and illness in animals, according to reports filed with federal veterinary officials, 501 dogs and one cat may have died as a result of eating the treats, or it may be a coincidental association with a number of dogs having renal problems.]

Q: Should fiber content be a consideration or only for dogs with constipation issues?

A: The feed industry is going in the right direction by adding fiber, but it's a small step.

Q: Is there any nutritional benefit to premium treats compared to those at the grocery store?

A: My opinion is if you're looking for health benefits, give vegetables and a little bit of fruit like apple, pear or banana. Dogs like carrots, sliced up apples, and they are probably the better treats to give in the long run. If you win the battle of the bulge, you get to eat more.

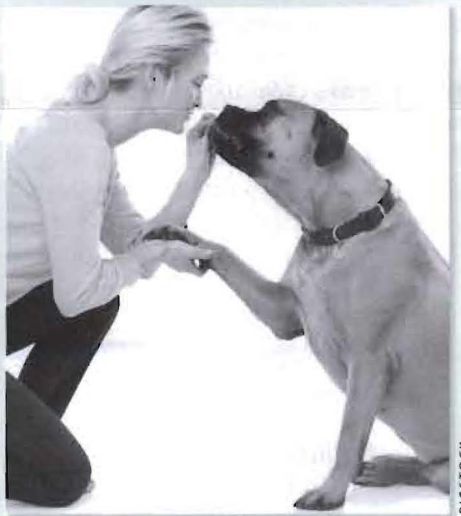
Q: Is it better to make homemade treats?

A: I don't think so, other than feeling good about doing something nice for your dog. ♦

CHECK OUT CALORIES WITH THE MANUFACTURERS

Pet treats are a \$2.3-billion-a-year industry in the U.S., with production ranging from food manufacturers employing thousands around the world to neighborhood mom and pop dog bakeries. The list below is a small sampling of companies marketing pet treats. Their websites have information about ingredients and contacts for consumer affairs to check on calorie counts if they're not on the product label:

- ◆ canidae.com
- ◆ delmontefoods.com
- ◆ pedigree.com
- ◆ pg.com (Procter & Gamble includes Iams among its brands.)
- ◆ mars.com
- ◆ milkbone.com
- ◆ nestle.com (Includes Purina among its brands.)
- ◆ waggersondogtreats.com



Dogs love them, and they're effective reinforcers for good behavior, but treats should make up no more than 10 percent of daily calories.

BIGSTOCK

CCD... (continued from the cover)

Animal Behavior at the Cornell University College of Veterinary Medicine. "It's important to rule out other medical conditions that may cause similar symptoms." (Please see sidebar.)

Typical Symptoms. Post-mortem examinations have shown beta-amyloid (a type of protein) plaques in the brains of senior dogs with CCD, similar to those in the brains of Alzheimer's patients. The plaques destroy brain cells, particularly in areas associated with memory and learning. The resulting typical symptoms are summarized in an acronym DISHA:

◆ **Disorientation:** Dogs initially show signs like standing in corners, staring off into space, being unable to figure out how to use the doggie door or becoming lost in the yard. They can hear but don't always recognize the direction a sound is coming from. In later stages, a dog may get into a closet and be unable to find his way out or paw at sofa coverings, as if trying to escape.

◆ **Interaction changes:** Your dog may not want to interact as much with other dogs as previously, including those who

were former favorite playmates or, more disheartening, interact with you and other family members. Dogs who once loved being petted may shy away. Conversely, some formerly independent pets become Velcro dogs, never wanting to leave their owner's side.

◆ **Sleep-wake cycle disruption:** The ability to distinguish between night and day may be lost. Your dog may sleep more during the day and be wakeful at night, pacing,

barking, howling or sometimes waking you numerous times to indicate he wants to go outside, whether or not he really has to urinate. Dr. Houpt notes that this is probably the hardest on the owner, no matter how emotionally difficult the other symptoms. "If your dog wakes you up six times a night, that can be very bad, especially if you have to work the next day," she says. Sleeping medications for your dog may eventually be indicated.

◆ **House soiling:** Dogs may forget their house training and lift their legs to urinate or squat to defecate inside the home in view of their owners. Dr. Houpt emphasizes that this is not the same as incontinence, where your dog can't help himself. With

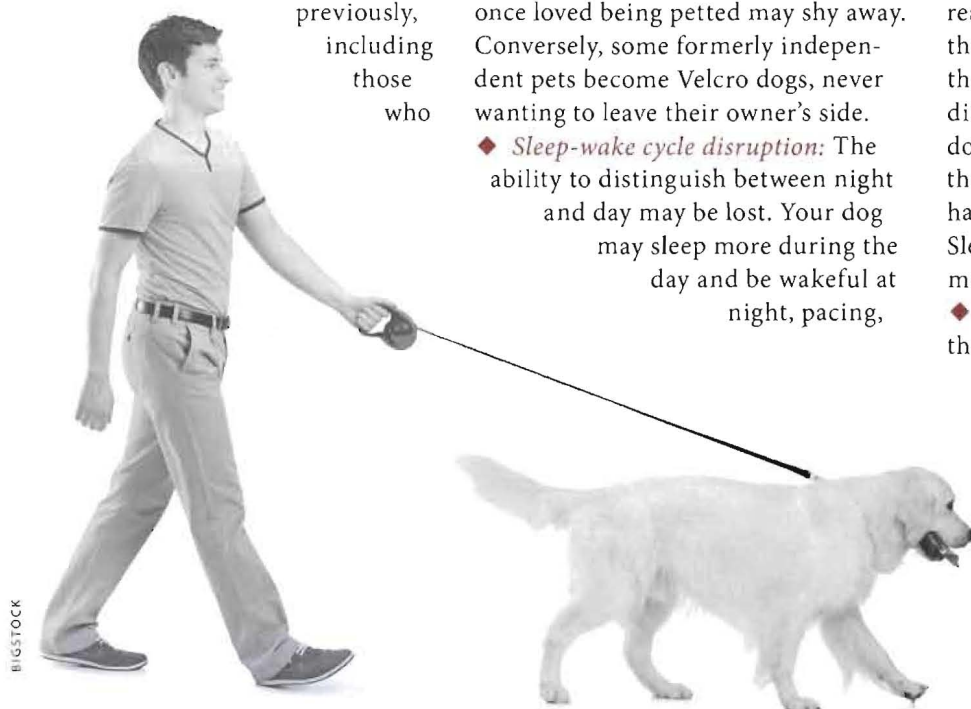
HOUSE TRAINING ACCIDENTS COULD BE A SIGN OF A MEDICAL CONDITION

Several medical conditions mimic the signs of canine cognitive dysfunction:

- ◆ Cushing's disease, caused by the overproduction of the hormone cortisol by the adrenal glands, may lead to an increase in thirst and, in turn, house training accidents.
- ◆ Hearing problems or dizziness resulting from inner ear infections may make a dog appear disoriented.
- ◆ Blindness caused by cataracts or glaucoma, especially if the onset is sudden, creates confusion.
- ◆ A urinary tract infection may cause more frequent urination.
- ◆ Arthritis can cause reduced activity.
- ◆ Pain of any kind may cause aggression, a change in behavior uncharacteristic of CCD but often mistakenly attributed to the syndrome.

A brain tumor, a possibility in a dog 12 years or older, can resemble all the signs of CCD because it can affect the same areas of the brain. Owners don't necessarily have to go to the expense of an MRI if a brain tumor is suspected, says behaviorist Katherine Houpt, VMD, Ph.D., at Cornell.

A large dose of corticosteroids may shrink a benign or malignant tumor, at least temporarily, and the dog's symptoms will abate. "In that case you might go for an MRI to confirm the diagnosis," she says. Although a geriatric dog may not be a good candidate for brain surgery, it is important to know that a tumor exists so that the owner won't expect a response to CCD treatments.



BIGSTOCK

Exercise is key, whether it's maintaining a schedule of walks to match your dog's physical abilities or getting him involved in short games of chase.

CCD, a dog retains bowel and bladder control, but forgets where he needs to exercise it.

◆ **Activity changes:** Dogs with CCD often lie around more than they did previously. Alternatively, their activity may become aimless. Instead of purposeful actions, such as seeking out their owners for food or attention, they may wander and pace.

It's useful to keep a journal of the dog's behavior over a few weeks to discuss with his veterinarian. An examination can include blood work, urinalysis and possibly X-rays to eliminate other possibilities before a diagnosis of CCD is made.

Studies have not produced any evidence that some breeds are more prone to CCD than others. Even more surprising, Dr. Houpt says, the dog's size makes no difference. "You wouldn't expect this, because large-breed dogs are more short-lived, but that's not the case." There's one exception to the general rule of not being able to predict the disease: Intact male dogs are at a lower risk for CCD.

Not all the signs of CCD will appear in every dog, and not all dogs develop the same signs. However, Dr. Houpt points out that about 30 percent of dogs have at least one sign of cognitive dysfunction by age 12, and

15 percent have two signs. By age 16, 70 percent have at least one sign, 30 percent at least two.

The drug Anipryl (also known as selegiline HCL or L-deprenyl), developed to treat Parkinson's disease in humans, was approved by the FDA in 1999 for use as a treatment for CCD. In some dogs, the drug results in dramatic improvement of symptoms in a matter of days or weeks. Some dogs have milder responses, and others show no improvement.

Brain Health. Nutritional changes can be as effective as —

or perhaps even more effective than — Anipryl. A study on canine brain aging published in the journal *Neurobiology of Aging* in 2002 concluded that, "A diet enriched in antioxidants reduces cognitive dysfunction." As a result of such studies, Hill's b/d diet was formulated with extra antioxidants, along with other vitamins, to promote brain health in older dogs. It often takes a few months for the diet to take effect, Dr. Houpt says, but in many cases the changes can be quite significant.

She notes that if your dog has a medical condition for which the ingredients in Hill's b/d are contraindicated, antioxidant supplements such as Neutricks and Senelife are options.

Keeping your dog mentally and physically active is another key to slowing the progress of CCD. Interactive food dispensing toys, for example, can help



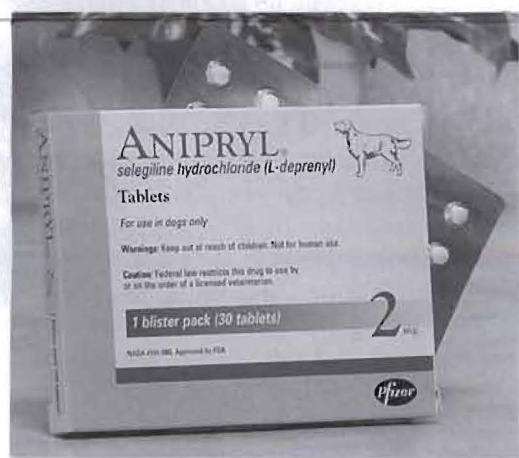
Interactive food dispensing toys like the Dog Spinny can help motivate a dog to continue to use his mental skills.

motivate a dog to use his mental skills. And maintaining training exercises — even if the results aren't the same as when your dog was younger — is helpful. Reducing your expectations and rewarding the small successes will keep both you and your dog from becoming frustrated.

Exercise is important, whether it's keeping up a schedule of walks to match your dog's physical abilities or getting him involved in short games of chase. Maintaining a healthy weight is necessary at this stage to keep him mobile.

All in all, Dr. Houpt says, "Even if your dog is old and rickety, don't just leave him lying in the corner. Try to include him in activities."

While you can't avoid the inevitable, you can take consolation in the fact you kept your dog in such good health that he became a senior. And you can continue to do the best you can to maintain a good quality of life for both you and your dog. ♦



Anipryl can result in dramatic improvement in some dogs with cognitive dysfunction while others have a mild response and still others show no improvement.



Katherine A. Houpt, VMD, Ph.D., diplomate of the American College of Veterinary Behaviorists and emeritus James Law Professor of Animal Behavior at Cornell University College of Veterinary Medicine, provided the answer on this page.

Please Share Your Questions

We welcome questions of general interest in 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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or email dogwatcheditor@cornell.edu

COMING UP ...

TICKS



PARVOVIRUS



AT-HOME
GROOMING



YEAR-ROUND
DISASTER
PLANNING



Training a Pup to Use a Litter Pan or Paper

Q I have a Poodle, Mika, with house breaking problems. I am 74 and have trained more dogs than I can remember. I am trying to litter-box train her as well as take her out. Although she sometimes uses the paper by the litter box, she never uses the box. If I take the paper away, she uses the floor. Using the paper might be OK, except she urinates by the edge, and so urine runs under it.

I got her at 3 months and she is 5 months now. She is otherwise a great joy, full of love for everything and life itself. Any suggestions would be appreciated.

A You are just my age — the prime of life. House breaking is a problem for many people. Actually, I hate the term “house breaking” because it implies that one has to break or punish the dog for eliminating in the house. I prefer “house training.”

You are to be commended for getting a puppy and house training her yourself rather than obtaining an older dog to save yourself the task. The older dog, because he has been forced to leave his original home, may have a host of problems.

You are asking Mika to learn to use two different substrates for urination — outside on grass or concrete, and inside on paper. Dogs usually have definite preferences for defecation substrates — grass, concrete wood chips (kennel-raised dogs often are accustomed to wood chips) — and less pronounced preferences for substrates on which to urinate. Most small dogs don't like to defecate on snow because their rumps are so close to the cold.

Keep a record of how often and when Mika urinates and defecates. Defecation usually occurs 30 minutes or so after a meal, and most dogs drink

right after they eat, especially if they are eating dry food. If you have been feeding her free choice, you should switch to scheduled meals to help her to be regular, and you to be able to predict when she should have to eliminate.

I would guess you are most interested in teaching Mika to use a litter pan for urination. Dogs usually do not have to jump into an area to eliminate so it is unnatural behavior. Purina markets a litter box (Secondnature) for dogs that features a cut-away side for easy entrance.

Mika now has a location preference because, if you remove the papers, she still uses the same spot on the floor. It would be harder if she eliminated randomly. You can put down plastic and then paper with the plastic extending beyond the papers, so it will catch any urine that misses the paper. Now you have a proper elimination area.

The next step is to encourage Mika to use it. Prepare to be observant. Reward her for urinating on the paper. Use a special treat she really loves and give it to her only for using the paper. To encourage her to stand in the middle of the paper instead of on the edge, give a bigger piece of the delicious food for hitting the paper. In case you aren't right beside her, pair a sound with that treat. You can use a clicker or just simply cluck because you always have your tongue with you.

First pair the treat with the cluck a few dozen times, and then cluck when she squats in the right place. That will “mark” the behavior so she knows why she is being rewarded. Give her the treat as soon as you can after the

cluck. If you are having a hard time catching her in the act, keep her on a leash attached to you and pay attention to signs her bladder is full. Some dogs pant, some walk strangely, some stare at you, etc. Take her to the paper when she shows these signs or when it has been four hours (or whatever time frame your records indicate) since her last urination. Reward when she uses the paper. Good luck. ♦

‘Dogs usually do not have to jump into an area to eliminate, so using the litter box is an unnatural behavior.’

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\$49 per year (Canada)

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