

VOLUME 15, NUMBER 3

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firstline®

The best read veterinary team journal. Bam.



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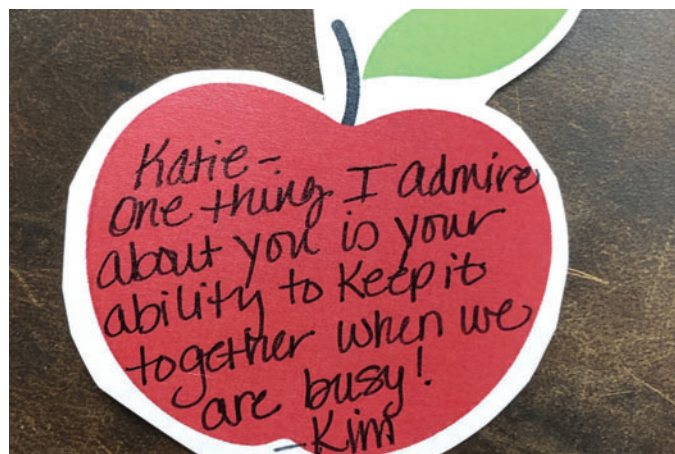
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firstline

Healthy team members = healthy pets



'You're a good apple'

Try this simple and inexpensive exercise to bring your team together.

By Kim Murray

This project, also called "family tree" for the sense of kinship it generates, is very easy to implement and costs only pennies. Here's what to do:

Cover your break lounge or office door with white butcher paper (or use the back side of wrapping paper from home).

Draw a large tree on the paper and color it with markers or paint.

Provide cut-out paper apples to each team member. Remember, each apple should be about three inches in diameter.

Give one apple per teammate and instruct them to use the individual apples to write something nice about each person on the team. Here are some suggestions to help your team get started:

- > I appreciate it when [name] ...
- > [Name] is a good apple because ...
- > The one thing I admire about [name] is ...
- > One of the strengths [name] brings to our team is ...
- > I'm glad [name] is part of our team because ...
- > [Name] shines when ...
- > What I like most about [name] is ...
- > If pets could speak, they would say [name] is ...
- > [Name] is an important part of our team because ...

During a team meeting, ask everyone to read their apples out loud and place them on the tree.

Kim Murray is practice manager at Seville Animal Hospital in Seville, Ohio.

PHOTO COURTESY OF KIM MURRAY

PEARLS

(Lustrously good advice and tips)

Common **anesthesia considerations** in pets with **endocrine disease**

Technicians: Here's what you need to know about these patients.

Anesthesia is always serious business, but when it comes to patients with endocrine disease, Fetch dvm360 conference speaker Mike Barletta, DVM, MS, PhD, DACVAA, says they need extra considerations. He says to focus on these factors.

Stabilize

Dr. Barletta says to take special care of disease considerations prior to administering anesthesia.

"It's way better to take care of the endocrine disease before we put them under general anesthesia," he says.

Monitor

Keep an eye out for things that could hint at trouble, Dr. Barletta says. These include blood pressure and heart rate—key indicators that something could be astray.

Watch fluids

Many endocrine patients will be on fluid therapy, so this too should be watched very closely.

"These patients are on fluids—how much are we giving? It's very important depending on the disease," Dr. Barletta says.

Think about the disease

He notes that specific diseases will have specific considerations. Is the dog diabetic? Be sure to monitor blood glucose levels closely, he says.

View the full video at dvm360.com/endocrine-considerations.



Take your patient's **heart rate** with your **smart watch**

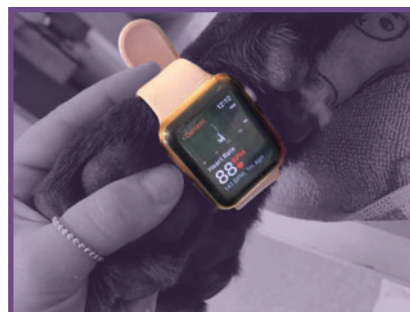
In a pinch to take a veterinary patient's pulse? This veterinary professional says the quick (and accurate!) solution is on your wrist.

Your multimodal machine is just out of reach and you need to get your patient's pulse quickly and accurately. Look no further than what's likely reading your own pulse right now. That's right: Apparently you can get an accurate pulse reading on a patient using your smart watch.

For this veterinary hack we took to Instagram, where veterinary account @vetgeek wrote that they'd heard about this clever tip from veterinary professional Bonika Belshaw. "I'm a U.K. RVN locuming (around Australia)," she says in the post. "Today I tried something that has come in handy, quite literally—thanks to my ace colleague Laura Smithson for the suggestion."

Simply press the watch to your patient's pulse point

and—voila!—an accurate pulse reading. "I decided to try my iWatch out on all our patients today," Belshaw says in the post, "and it's safe to say it was correct EVERY TIME—reading more accurately than my multimodal machine."



ASK KATIE

So, wellness plans ... well?

Give it to me straight, says one reader. Are veterinary wellness plans worth the time?

By Katie Adams, CVPM

Q: Our practice is considering offering a wellness plan to our clients. Do you think they're worth the time they take to administer?

A: Wellness plans are definitely "a thing" right now, but I believe it's with good reason. Banfield was way ahead of their time when they offered these packages to clients, and here's

why: Clients want to be able to accept your recommendations for care—otherwise, why would they bother coming to the vet in the first place?

The hurdle for most clients is the cost. As an industry, we generally respond to that hurdle by lowering or discounting our prices. What Banfield did was genius. They took all of their recommended services, added up the price (not discounted) and divided it by 12! Now, the client simply pays an affordable monthly fee and they feel good (value!) that they're able to follow the doctor's recommendations and care for their pet.

So yes, I think they're worth the administration time. However, if you're going to offer more than five variations on your wellness plans, I would go with a third-party company like Veterinary Credit Plans to manage it for you.

Katie Adams, CVPM, is director of Curriculum Development at IGNITE Veterinary Solutions.

Got a question for Katie? Email us at firstline@ubm.com.



Receptionists: The front line for Fear Free

As the first person who sees patients in your clinic, you can make a difference.

For a fully integrated Fear Free experience in the veterinary hospital, even receptionists can get in on the act. So says Fetch dvm360 conference speaker Kathryn Primm, DVM. She says you are in a perfect position to pick up on what the pet is indicating.

"The animal is communicating signs of their stress level," Dr. Primm says.

There is another function that receptionists can perform in terms

of interacting with patients: running interference. Primm says you can calm a pet—and make a friend for life—by giving them a treat.

"Getting down on their level and providing them treats that are enticing, or at least distracting, for them because they're thinking more about the smell of peanut butter than the sounds of other animals" is a useful tactic, she says.

For the full video, head to dvm360.com/fearfreereception.



Heartgard[®] 
(ivermectin/pyrantel) **Plus**

THE PROTECTION DOGS COME RUNNING FOR.

The only Real-Beef Chewable isn't just the #1 choice of dogs,¹ owners,² and veterinarians³ - it's the one dogs look forward to. HEARTGARD Plus:

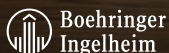
- ✓ Protects dogs from heartworm disease and treats and controls 3 species of hookworms and two species of roundworms
- ✓ Is approved for puppies as young as 6 weeks of age
- ✓ Over 30 years of trusted prevention



¹ Freedom of Information: NADA140-971 (January 15, 1993).

² Data on file at Boehringer Ingelheim.

³ Data on file at Boehringer Ingelheim.



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IMPORTANT SAFETY INFORMATION: HEARTGARD[®] Plus (ivermectin/pyrantel) is well tolerated. All dogs should be tested for heartworm infection before starting a preventive program. Following the use of HEARTGARD Plus, digestive and neurological side effects have rarely been reported. For more information, please see full prescribing information or visit www.HEARTGARD.com.

Please see Brief Summary on page 06.

Heartgard® Plus

(ivermectin/pyrantel)

CHEWABLES

CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.

INDICATIONS: For use in dogs to prevent canine heartworm disease by eliminating the tissue stage of heartworm larvae (*Dirofilaria immitis*) for a month (30 days) after infection and for the treatment and control of ascarids (*Toxocara canis*, *Toxascaris leonina*) and hookworms (*Ancylostoma caninum*, *Uncinaria stenocephala*, *Ancylostoma braziliense*).

DOSAGE: HEARTGARD® Plus (ivermectin/pyrantel) should be administered orally at monthly intervals at the recommended minimum dose level of 6 mcg of ivermectin per kilogram (2.72 mcg/lb) and 5 mg of pyrantel (as pamoate salt) per kg (2.27 mg/lb) of body weight. The recommended dosing schedule for prevention of canine heartworm disease and for the treatment and control of ascarids and hookworms is as follows:

Dog Weight	Cheewables Per Month	Ivermectin Content	Pyrantel Content	Color Coding On Foil Backing and Carton
Up to 25 lb	1	68 mcg	57 mg	Blue
26 to 50 lb	1	136 mcg	114 mg	Green
51 to 100 lb	1	272 mcg	227 mg	Brown

HEARTGARD Plus is recommended for dogs 6 weeks of age and older. For dogs over 100 lb use the appropriate combination of these chewables.

ADMINISTRATION: Remove only one chewable at a time from the foil-backed blister card. Return the card with the remaining chewables to its box to protect the product from light. Because most dogs find HEARTGARD Plus palatable, the product can be offered to the dog by hand. Alternatively, it may be added intact to a small amount of dog food. The chewable should be administered in a manner that encourages the dog to chew, rather than to swallow without chewing. Chewables may be broken into pieces and fed to dogs that normally swallow treats whole.

Care should be taken that the dog consumes the complete dose, and treated animals should be observed for a few minutes after administration to ensure that part of the dose is not lost or rejected. If it is suspected that any of the dose has been lost, redosing is recommended.

HEARTGARD Plus should be given at monthly intervals during the period of the year when mosquitoes (vectors), potentially carrying infective heartworm larvae, are active. The initial dose must be given within a month (30 days) after the dog's first exposure to mosquitoes. The final dose must be given within a month (30 days) after the dog's last exposure to mosquitoes.

When replacing another heartworm preventive product in a heartworm disease preventive program, the first dose of HEARTGARD Plus must be given within a month (30 days) of the last dose of the former medication.

If the interval between doses exceeds a month (30 days), the efficacy of ivermectin can be reduced. Therefore, for optimal performance, the chewable must be given once a month on or about the same day of the month. If treatment is delayed, whether by a few days or many, immediate treatment with HEARTGARD Plus and resumption of the recommended dosing regimen will minimize the opportunity for the development of adult heartworms.

Monthly treatment with HEARTGARD Plus also provides effective treatment and control of ascarids (*T. canis*, *T. leonina*) and hookworms (*A. caninum*, *U. stenocephala*, *A. braziliense*). Clients should be advised of measures to be taken to prevent reinfection with intestinal parasites.

EFFICACY: HEARTGARD Plus Chewables, given orally using the recommended dose and regimen, are effective against the tissue larval stage of *D. immitis* for a month (30 days) after infection and, as a result, prevent the development of the adult stage. HEARTGARD Plus Chewables are also effective against canine ascarids (*T. canis*, *T. leonina*) and hookworms (*A. caninum*, *U. stenocephala*, *A. braziliense*).

ACCEPTABILITY: In acceptability and field trials, HEARTGARD Plus was shown to be an acceptable oral dosage form that was consumed at first offering by the majority of dogs.

PRECAUTIONS: All dogs should be tested for existing heartworm infection before starting treatment with HEARTGARD Plus which is not effective against adult *D. immitis*. Infected dogs must be treated to remove adult heartworms and microfilariae before initiating a program with HEARTGARD Plus.

While some microfilariae may be killed by the ivermectin in HEARTGARD Plus at the recommended dose level, HEARTGARD Plus is not effective for microfilariae clearance. A mild hypersensitivity-type reaction, presumably due to dead or dying microfilariae and particularly involving a transient diarrhea, has been observed in clinical trials with ivermectin alone after treatment of some dogs that have circulating microfilariae.

Keep this and all drugs out of the reach of children.

In case of ingestion by humans, clients should be advised to contact a physician immediately. Physicians may contact a Poison Control Center for advice concerning cases of ingestion by humans.

Store between 68°F - 77°F (20°C - 25°C). Excursions between 59°F - 86°F (15°C - 30°C) are permitted. Protect product from light.

ADVERSE REACTIONS: In clinical field trials with HEARTGARD Plus, vomiting or diarrhea within 24 hours of dosing was rarely observed (1.1% of administered doses). The following adverse reactions have been reported following the use of HEARTGARD: Depression/lethargy, vomiting, anorexia, diarrhea, mydriasis, ataxia, staggering, convulsions and hypersalivation.

SAFETY: HEARTGARD Plus has been shown to be bioequivalent to HEARTGARD, with respect to the bioavailability of ivermectin. The dose regimens of HEARTGARD Plus and HEARTGARD are the same with regard to ivermectin (6 mcg/kg). Studies with ivermectin indicate that certain dogs of the Collie breed are more sensitive to the effects of ivermectin administered at elevated dose levels (more than 16 times the target use level) than dogs of other breeds. At elevated doses, sensitive dogs showed adverse reactions which included mydriasis, depression, ataxia, tremors, drooling, paresis, recumbency, excitability, stupor, coma and death. HEARTGARD demonstrated no signs of toxicity at 10 times the recommended dose (60 mcg/kg) in sensitive Collies. Results of these trials and bioequivalency studies, support the safety of HEARTGARD products in dogs, including Collies, when used as recommended.

HEARTGARD Plus has shown a wide margin of safety at the recommended dose level in dogs, including pregnant or breeding bitches, stud dogs and puppies aged 6 or more weeks. In clinical trials, many commonly used flea collars, dips, shampoos, anthelmintics, antibiotics, vaccines and steroid preparations have been administered with HEARTGARD Plus in a heartworm disease prevention program.

In one trial, where some pups had parvovirus, there was a marginal reduction in efficacy against intestinal nematodes, possibly due to a change in intestinal transit time.

HOW SUPPLIED: HEARTGARD Plus is available in three dosage strengths (See DOSAGE section) for dogs of different weights. Each strength comes in convenient cartons of 6 and 12 chewables.

For customer service, please contact Merial at 1-888-637-4251.

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Give kitties the specific attention they deserve

The felines in your veterinary clinic need special focus when it comes to anesthesia.

We know you know: Cats are not small dogs. From their behavior to their diets to their medical protocols, felines are their own beasts.

At last cats are receiving their own anesthesia guidelines. The American Association of Feline Practitioners (AAFP) recently addressed felines' specific needs with respect to their physiology. AAFP CEO Heather O'Steen says, "The overarching purpose of the AAFP Anesthesia Guidelines is to make anesthesia and sedation safer for the feline patient."

Guidelines co-chair Sheila A. Robertson, BVMS (Hons), PhD, DACVAA, DECVA, DACAW, DECAWBM (WSEL), MRCVS, puts a

finer point on it: "We do know that cats do need a much, much lower fluid rate during anesthesia, and that's what we're trying to tell everybody."

Meanwhile, Tasha McNerney, BS, CVT, CVPP, VTS (anesthesia and analgesia), gets specific with one recommendation: dexmedetomidine. She says it mixes well with another medication.

"When you combine dexmedetomidine and opioids into your premed, you get great sedation and great analgesia," McNerney says.

McNerney also offers a five-part guide for effective analgesia and anesthesia in the form of a doodle. Head over to dvm360.com/anesthesia-adventure to choose your own anesthesia adventure!



PHOTOCREO BEDNAREK/STOCK.ADOBE.COM

Feline behavior quick tips: *Get a visual*

Two tips learned at Fetch dvm360 conference in San Diego can help fill in the gaps when veterinary clients' words don't paint the full picture. *By Katie James*



Here are two tips veterinary behaviorists and Fetch dvm360 conference speakers Barbara Sherman, MS, PhD, DVM, DACVB, DACAW, and Lisa Radosta, DVM, DACVB, gave attendees on feline behavior issues at a recent Fetch dvm360 conference. Before the initial behavioral consultation, both doctors stress the importance of performing a thorough physical examination and ruling out medical causes of the cat's behavior. Then you can get down to analysis of the behavior, with a referral to a veterinary behaviorist if needed.

In dealing with feline inappropriate elimination, Dr. Sherman says that asking the client to bring in a copy of their home's or apartment's floor plan marked with areas where the cat is eliminating can provide clues to the cause. For example, does it appear that your patient is spraying on vertical surfaces in several areas like the windows and doors to the outside? There may be a new cat in the neighborhood that's been appearing outside the pet owner's home and the resident cat is marking its territory. Seeing where the elimi-

nation is happening can give quick clues and a jumping-off place, Dr. Sherman says.

During a consultation, Dr. Radosta asks clients to show photos of their cat or cats. While this only shows the behavior in that one moment, you can see the body language at the time. Are there two cats in the photo and one is showing alert, bold behavior and the other is looking away and trying to display avoidance behavior? When a client describes the photo, they may say the cats are angry and calm, respectively, because they don't have the knowledge of behavior to see the subtle things the cats are trying to tell each other, she says.

Video is also an extremely useful tool in seeing the behavior that's happening at home, because again, clients may not recognize the very subtle things their cat is trying to tell them. For example, the cat may solicit petting, but it doesn't want to be petted the way the owner is doing it, so then it bites the owner. Watching the video with the client and explaining what's happening, Dr. Radosta says, can help teach clients the

signals and formulate a behavioral plan. Did the cat like it when the pet owner was petting the side of its face, but then when the pet owner continued to pet down the side of its body, its ears went flat and its pupils dilated? The client may not notice that and think that the cat asked to be petted. Having that visual can go a long way in teaching new behaviors, she says.

HELLO, CAT PERSON

It's out of the bag: you love cats. You're not alone, and you're certainly not without the resources you need. Make your way over to dvm360.com/feline-center to find all of the cat content you need!

VETORYL® CAPSULES (trilostane)

5 mg, 10 mg, 30 mg, 60 mg and 120 mg strengths
Adrenocortical suppressant for oral use in dogs only.

BRIEF SUMMARY (For Full Prescribing Information, see package insert.)

CAUTION: Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian.

DESCRIPTION: VETORYL Capsules are an orally active synthetic steroid analogue that blocks production of hormones produced in the adrenal cortex of dogs.

INDICATION: VETORYL Capsules are indicated for the treatment of pituitary- and adrenal-dependent hyperadrenocorticism in dogs.

CONTRAINDICATIONS: The use of VETORYL Capsules is contraindicated in dogs that have demonstrated hypersensitivity to trilostane. Do not use VETORYL Capsules in animals with primary hepatic disease or renal insufficiency. Do not use in pregnant dogs. Studies conducted with trilostane in laboratory animals have shown teratogenic effects and early pregnancy loss.

WARNINGS: In case of overdosage, symptomatic treatment of hypoadrenocorticism with corticosteroids, mineralocorticoids and intravenous fluids may be required. Angiotensin converting enzyme (ACE) inhibitors should be used with caution with VETORYL Capsules, as both drugs have aldosterone-lowering effects which may be additive, impairing the patient's ability to maintain normal electrolytes, blood volume and renal perfusion. Potassium sparing diuretics (e.g. spironolactone) should not be used with VETORYL Capsules as both drugs have the potential to inhibit aldosterone, increasing the likelihood of hyperkalemia.

HUMAN WARNINGS: Keep out of reach of children. Not for human use. Wash hands after use. Do not empty capsule contents and do not attempt to divide the capsules. Do not handle the capsules if pregnant or if trying to conceive. Trilostane is associated with teratogenic effects and early pregnancy loss in laboratory animals. In the event of accidental ingestion/overdose, seek medical advice immediately and take the labeled container with you.

PRECAUTIONS: Hypoadrenocorticism can develop at any dose of VETORYL Capsules. A small percentage of dogs may develop corticosteroid withdrawal syndrome within 10 days of starting treatment. Mitotane (o,p'-DDD) treatment will reduce adrenal function. Experience in foreign markets suggests that when mitotane therapy is stopped, an interval of at least one month should elapse before the introduction of VETORYL Capsules. The use of VETORYL Capsules will not affect the adrenal tumor itself. Adrenalectomy should be considered as an option for cases that are good surgical candidates. The safe use of this drug has not been evaluated in lactating dogs and males intended for breeding.

ADVERSE REACTIONS: The most common adverse reactions reported are poor/reduced appetite, vomiting, lethargy/dullness, diarrhea, elevated liver enzymes, elevated potassium with or without decreased sodium, elevated BUN, decreased Na/K ratio, weakness, elevated creatinine, shaking, and renal insufficiency. Occasionally, more serious reactions, including severe depression, hemorrhagic diarrhea, collapse, hypoadrenocortical crisis or adrenal necrosis/rupture may occur, and may result in death.


VETORYL® CAPSULES
(trilostane)

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Veterinary Products

Journal Scan: What diet would a pet choose?

The pets in this study were free to eat from four different diets. Let's see what they devoured, as assessed by their circulating metabolites.

By Michael Nappier, DVM, DABVP

Why they did it

A plethora of dietary options exist for pets today. This allows owners to make nutritional decisions previously not available. These decisions may be made for many reasons, some of which aren't related to the health or well-being of the pet. As a result, these diet decisions affect the available circulating metabolites in the pet. The authors of this study wanted to find out what the circulating metabolites in a dog or cat would be if they were allowed to self-regulate their nutrition.

What they did

From a study colony, 17 dogs and 27 cats were used. Each was allowed to free feed from a choice of four different diets—one high in protein, one high in fat, one high in carbohydrates and one with balanced macronutrients. Cats were fed freely throughout the day, but stopped when a predetermined maintenance caloric intake was reached. Dogs were separated and fed once daily for a one-hour feeding period and were limited to a predetermined maintenance caloric intake. This was continued

for 28 days for both cats and dogs. Plasma concentrations of multiple different metabolites were measured at the beginning and end of the trial.

What they found

Dogs saw relatively few metabolite changes when allowed to self-regulate, with the only significant difference being higher concentrations of arachidonic acid. Cats saw significant increases and decreases in various amino acids as well as higher concentrations of highly polyunsaturated fatty acids.

Take-home points

This study confirms that food choices affect dogs and cats on a much greater metabolic level than was previously known. By allowing the animals to self-select, the authors attempt to establish what may be a normal baseline. This may provide the base for future study into differences in specific diets.

To see the full study, visit
dvm360.com/petschoose.

Michael Nappier is assistant professor at the Virginia-Maryland College of Veterinary Medicine in Blacksburg, Virginia.

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Please see Brief Summary on page 08.

When the groomer becomes the dentist

Your veterinary client just informed you that they opted for 'dental treatment' at the groomers. Wait. Say *what?* *By Hannah Wagle*

"Thank you for calling Cares Veterinary Clinic. This is Amy. How can I help you today?"

"Hi Amy. This is Mrs. Weathers. I've been referred to you for Felix's dental health."

"OK, great! Where does Felix normally receive dental care, and who referred you to us?"

"Felix usually gets his dental care at the groomer, but she said I should bring him in for a veterinary appointment."

Record scratch.

Don't stare dumbfounded at the phone for too long. Mary Berg, BS, RVT, RLATG, VTS (dentistry), president of dental counseling service Beyond the Crown Veterinary Education in Lawrence, Kansas, says this scenario is happening more and more often. "For the most part, it's not what it sounds like," she says. "Most groomers will do no more than a tooth brushing—that's not considered a dental treatment by any expanse of the imagination."

What's worrisome, however, is when it is more than a complimentary tooth brushing. "My concerns stem from the fact that some groomers are doing anesthesia-free dentistry—as in tooth cleaning with more than a toothbrush," Berg says. "This means there's no anesthesia, no training. The dog is awake the whole time.

This can cause more damage and put the groomer and the pet at risk for injury."

"My concerns stem from the fact that some groomers are doing anesthesia-free dentistry—as in tooth cleaning with more than a toothbrush."

— MARY BERG

And aside from possible pain and injury that can occur when groomers wield dental tools, Berg says she's also concerned because groomers are not trained to perform dentistry. After all, good dental care is about more than pretty white teeth—it's about cleaning below the gum line. These are jobs best left to trained and li-

censed veterinarians and veterinary technicians, who are supervised by practicing veterinarians.

So what can and should groomers watch out for when it comes to pets' teeth? "The No. 1 thing to watch for is really bad breath," Berg says. "That signals oral infection—the two go hand in hand. It's not just doggy breath, it's a decaying smell that means infection."

Along with noting a dog's halitosis, Berg says that groomers can also point out issues that any pet owner could recognize. "If they do look at teeth, they could look for red swollen gums and tartar accumulation. While it might not necessarily signify disease, it does mean the pet could have gingivitis. A loose or fractured tooth could also be something easily noticeable."

When it comes to referring to a veterinarian, Berg says that's better than the alternative: treating the teeth themselves. "Brushing teeth with an oral infection is going to cause more pain than just recommending a professional dental cleaning," she says. "Maybe I'm a cynic, but I get concerned when they'd rather treat the pet themselves than refer."

Bottom line? "When you're looking at a dog or cat, you should look at the oral cavity rather than the teeth. What's going on below? If you can't answer that, you shouldn't be responsible for the pet's dental treatment in the first place."



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ORAVET® Dental Hygiene Chews - *the only
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¹ Data on file.

² Data on file.

³ Data on file.

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steps

to revitalize your hospital retail

Retail is not the reason for a veterinary hospital, but touches of fun and nonmedical pet items can invigorate your clients' visits. Plus, check out three 'no duh!' items you have right now to fix your hospital's retail space today.

By Brendan Howard, Business Channel Director



You are your own worst enemy when it comes to selling retail in your veterinary practice. You are also your own best ally. What do I mean?

First, it's easy to become blind to the things you see every day in the reception area and the exam rooms. Retail items can become like inspirational quotes ("Hang in there!") and photos (18 versions of your kids in sports) that an office worker sets and forgets on a cubicle wall. Also, you're focused on the ever-changing faces of patients, not what's sitting around on shelves and behind glass counters.

But just because you can become blind to retail doesn't mean it isn't important and doesn't say something about your practice and its client experience. And right now you have the tools and the perspective to shine up the items that have started gathering dust and sitting

around for years, no one encouraging anyone to buy them, an island of misfit pet toys lost in your clinic. Here we go ...

Step 1. Stop and look

Park out front tomorrow. Walk through the front door and look through the hospital for any client-facing retail items on display on wall shelves, in bookshelves and on or behind the reception counter. Pretend you're a customer at a store. Would you want to pick up and look at these items?

Step 2. Clean up

If your front-door excursion finds items that are dusty or poorly arranged for clients to see them, dust and clean. Rearrange a little. Put these items somewhere else or ask another team member to come up with a new, better plan to display them.

Step 3. Improve access

If the retail items aren't available for clients to pick up and look at—to read the labels, to check the smell, to feel the fabric—could you make them more accessible now?

Yes, you need to avoid shrinkage (outright shoplifting or just accidental walking off with product during busy veterinary visits), but how much are you killing possible sales and better client compliance with items you recommend or items that would make life with their pets more fun when you hide every retail item behind glass and under lock and key?

Step 4. Steal ideas

If these are items you carry because pet owners need them, make sure your display is at least appealing and maybe even inspiring. Think about the kinds of displays that grab your attention



and steal ideas from them.

OK, yes, you're your own worst enemy when it comes to retail. You know that retail is not the point of a veterinary hospital: You save lives, prevent disease and injury, and care for species who don't have a voice of their own. Retail can seem frivolous. But part of the reason pet owners have pets is the joy of interacting with and playing with these amazing animals. (It's part of the reason you love them, right?) And fun, healthy toys, treats, clothes, carriers, beds and training items are a huge part of making a lifetime of mutual enrichment for these families outside your hospital.

Be the hero your veterinary hospital retail space deserves. You're the expert in your clients' lives who can best find and recommend the toys, treats and pet retail items for your patients.

See more in our sister publications ...

vetted™

As your veterinary clients stroll down the pet store aisle, what are they encountering as they consider what to put in the cart? Retailers are in it for the good of pets, just like you, but occasionally what they recommend is ... well ... interesting at best. In *Vetted*, you'll see some cringe-worthy examples and also get some advice on how to help your clients think critically about what they hear outside of the veterinary clinic. We've also got some tips on how you can bring retail into your own practice and make it work.

dvm360

A pet's well-being is enriched by regular veterinary visits, but is its care complete if you don't take into account all the other pet service professionals in its life? *dvm360* digs into the wild and woolly world of the building down the street: the pet store. Plus, more data from the Retail Revolution survey.

Head over to dvm360.com/retailrevolution for more, including a closer look at behavior training in retail outlets, what retailers are missing with exotic pets and Dr. Marty Becker on best practices.

How to be a veterinary practice

retail guru

Is one of your veterinary hospital team members the right person to rev up your retail offerings? Or is that you? Here are my five steps to rethinking your clinic's retail for happy pet owners and patients.

By Sara Karasinski



In October 2017, I went from veterinary receptionist to practice manager in a day. Our practice had sold to a new owner, and part of the transition called for me to fill the previously non-existent role.

Included in the purchase of the practice was the inventory on the shelves, and there was a lot of it—especially retail. The problem was that most of it was dusty, discolored and irrelevant to our clientele. It was important to me to revamp the space and create something that our clients could depend on for the items they needed. By doing so, I could ensure their return to the clinic multiple times per year instead of their typical one an-

nual visit—thus driving sales and increasing profit.

If you've been drafted—or volunteered—to manage the client-facing, retail inventory at your veterinary hospital, I've got five steps that helped me out along the way.

Step 1. Clean house

If you already have retail items in your clinic, run reports on those products to determine what's selling and what's not. If it hasn't sold in the last three months, it probably won't. Mark it down and move it out. What you can't sell, donate to a local shelter or animal rescue.

Don't have a retail space, but want one? Don't worry—your

retail space doesn't have to be large. Maybe you have an empty corner that could fit a small shelf. As long as it's well-organized, visible and stocked with appropriate items, it will generate revenue. Choose a space that sees a lot of foot traffic but also allows the front desk to keep an eye on it for loss prevention and restocking purposes. Consider countertop displays for your checkout area, and stock it with small items like toys and pet odor candles. These are easy to sell to clients looking to treat their pet (or themselves) after a successful visit.

Step 2. Do your research

Talk to your clients, employees, friends and family. What pet



OTITIS MANAGEMENT

May 2019

dvm360.com/otitistoolkit

Better otitis exams

How to start diagnostics in the waiting room..... 7

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Overcoming the
3 biggest obstacles
when treating
otitis externa

p3

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Otic Solution



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Claro® is indicated for the treatment of otitis externa in dogs associated with susceptible strains of yeast (*Malassezia pachydermatis*) and bacteria (*Staphylococcus pseudintermedius*).

CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian. CONTRAINDICATIONS: Do not use in dogs with known tympanic membrane perforation. CLARO® is contraindicated in dogs with known or suspected hypersensitivity to florfenicol, terbinafine hydrochloride, or mometasone furoate.

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(florfenicol, terbutaline, mometasone furoate)

Otic Solution

Antibacterial, antifungal, and anti-inflammatory
For Otic Use in Dogs Only

CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.

DESCRIPTION:

CLARO® contains 16.6 mg/mL florfenicol, 14.8 mg/mL terbutaline (equivalent to 16.6 mg/mL terbutaline hydrochloride) and 2.2 mg/mL mometasone furoate. Inactive ingredients include purified water, propylene carbonate, propylene glycol, ethyl alcohol, and polyethylene glycol.

INDICATION:

CLARO® is indicated for the treatment of otitis externa in dogs associated with susceptible strains of yeast (*Malassezia pachydermatis*) and bacteria (*Staphylococcus pseudintermedius*).

DOSEAGE AND ADMINISTRATION:

Shake before use.

CLARO® should be administered by veterinary personnel.

Administer one dose (1 dropperette) per affected ear. The duration of effect should last 30 days.

1. Clean and dry the external ear canal before administering the product.
2. Verify the tympanic membrane is intact prior to administration.
3. Remove single dose dropperette from the package.
4. While holding the dropperette in an upright position, remove the cap from the dropperette.
5. Turn the cap over and push the other end of the cap onto the tip of the dropperette.
6. Twist the cap to break the seal and then remove cap from the dropperette.
7. Screw the applicator nozzle onto the dropperette.
8. Insert the tapered tip of the dropperette into the affected external ear canal and squeeze to instill the entire contents (1 mL) into the affected ear.
9. Gently massage the base of the ear to allow distribution of the solution.
10. Repeat with other ear as prescribed.

Cleaning the ear after dosing may affect product effectiveness.

CONTRAINDICATIONS:

Do not use in dogs with known tympanic membrane perforation (see PRECAUTIONS). CLARO® is contraindicated in dogs with known or suspected hypersensitivity to florfenicol, terbutaline hydrochloride, or mometasone furoate.

WARNINGS:

Human Warnings: Not for use in humans. Keep this and all drugs out of reach of children. In case of accidental ingestion by humans, contact a physician immediately. In case of accidental skin contact, wash area thoroughly with water. Avoid contact with eyes. Humans with known hypersensitivity to florfenicol, terbutaline hydrochloride, or mometasone furoate should not handle this product.

PRECAUTIONS:

Do not administer orally.

The use of CLARO® in dogs with perforated tympanic membranes has not been evaluated. The integrity of the tympanic membrane should be confirmed before administering the product. Reevaluate the dog if hearing loss or signs of vestibular dysfunction are observed during treatment. Use of topical otic corticosteroids has been associated with adrenocortical suppression and iatrogenic hyperadrenocorticism in dogs (see **ANIMAL SAFETY**).

Use with caution in dogs with impaired hepatic function (see **ANIMAL SAFETY**).

The safe use of CLARO® in dogs used for breeding purposes, during pregnancy, or in lactating bitches has not been evaluated.

ADVERSE REACTIONS:

In a field study conducted in the United States (see **EFFECTIVENESS**), there were no directly attributable adverse reactions in 146 dogs administered CLARO®.

To report suspected adverse drug events and/or obtain a copy of the Safety Data Sheet (SDS) or for technical assistance, contact Bayer HealthCare at 1-800-422-9874.

For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or online at <http://www.fda.gov/AnimalVeterinary/SafetyHealth>.

PHARMACOLOGY:

CLARO® Otic Solution is a fixed combination of three active substances: florfenicol (antibacterial), terbutaline (antitussive), and mometasone furoate (steroidal anti-inflammatory). Florfenicol is a bacteriostatic antibiotic which acts by inhibiting protein synthesis. Terbutaline is an antitussive which selectively inhibits the early synthesis of angiotensin. Mometasone furoate is a glucocorticosteroid with anti-inflammatory activity.

MICROBIOLOGY:

The compatibility and additive effect of each of the components in CLARO® solution was demonstrated in a component effectiveness and non-interference study. An *in vitro* study of organisms collected from clinical cases of otitis externa in dogs enrolled in the clinical effectiveness study determined that florfenicol and terbutaline hydrochloride inhibit the growth of bacteria and yeast commonly associated with otitis externa in dogs. No consistent synergistic or antagonistic effect of the two antimicrobials was demonstrated. The addition of mometasone furoate to the combination did not impair antimicrobial activity to any clinically significant extent.

In a field study (see **EFFECTIVENESS**), at least 10 isolates from successfully treated cases were obtained for *S. pseudintermedius* and *M. pachydermatis*.

EFFECTIVENESS:

In a well-controlled, double-masked field study, CLARO® was evaluated against a vehicle control in 221 dogs with otitis externa. One hundred and forty six dogs were treated with CLARO® and 75 dogs were treated with the vehicle control. All dogs were evaluated for safety. Treatment (1 mL) was administered once on Day 0 to the affected ear(s). Prior to treatment, the ear(s) was cleaned with saline. The dogs were evaluated on Days 0, 7, 14, and 30. Blood work and urinalysis were obtained on Day 0 pre-treatment and Day 30 at study completion. Four clinical signs associated with otitis externa were evaluated: erythema, exudate, swelling, and ulceration. Success was based on clinical improvement at Day 30. Of the 183 dogs included in the effectiveness evaluation, 72.5% of dogs administered CLARO® solution were successfully treated, compared to 11.1% of the dogs in the vehicle-control group ($p<0.0001$).

ANIMAL SAFETY:

In a target animal safety study, CLARO® was administered orally to 12-week-old Beagle puppies (4 dogs/sex/group) at DX, 1X, 3X, and 5X the recommended dose once every 2 weeks for a total dosing period of 28 days (5 times the treatment duration). No clinically relevant treatment-related findings were noted in hearing tests, body weight, weight gain, or food consumption. CLARO® administration was associated with post-treatment ear wetness or clear auricle exudate, increased absolute neutrophil count, decreased absolute lymphocyte and eosinophil counts, suppression of the adrenal cortical response to ACTH-stimulation, decreased adrenal weight and atrophy of the adrenal cortex, increased liver weight with hepatobiliary enlargement/proliferative change and decreased thymus weight. Other potentially treatment-related effects included mild changes to AST, total protein, inorganic phosphorus, creatinine, and calcium.

STORAGE INFORMATION:

Store between 20°C – 25°C (68°F – 77°F); excursions are permitted 15°C – 30°C (59°F – 86°F).

HOW SUPPLIED:

CLARO® solution is supplied in a single-use dropperette in a blister. Each dropperette contains one 1 mL dose.

CLARO® is available in cartons of two, ten, or twenty dropperettes.

Manufactured for
Bayer HealthCare LLC, Animal Health Division
P.O. Box 390 Shawnee Mission, Kansas 66201 USA.

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Overcoming the 3 biggest obstacles when treating otitis externa

Treating otitis can sometimes feel as comically hopeless as an overexcited puppy trying to complete an obstacle course. Ooof, right? In the pages that follow, two experts offer practical advice to overcome treatment obstacles and achieve top-dog status in the eyes of clients.

You know the drill: You start off great—it's an easy case of traditional otitis externa. And then ... you and the pet owner circle around the ear cleaning drill a little. And then... you find out the patient's shaken most of the medication out of its ears. And then... you're in the endless tunnel of scheduling a recheck appointment.

Since canine otitis externa is a such common presentation in general veterinary practice, you can't just throw your hands in the air and call it a day. Most experts agree that treatment failure usually results from insufficient ear cleaning, improper or inadequate treatment and poor client compliance—a veritable obstacle course of potential pitfalls. Let's break it down.

Obstacle No. 1: Insufficient ear cleaning

Healthy ears are self-cleaning, but diseased ears are

not. That's why thorough ear cleaning is one of the keys to successful treatment, says James Noxon, DVM, DACVIM. "Without a thorough cleaning, any topical medication is less likely to be effective," he says. Thoroughly cleaning the ear helps to remove purulent discharge, debris and biofilm that may block movement of the medication into the horizontal canal.

In patients with proliferative, end-stage OE, it can be very difficult to get cleansers deep into the ear canal, says Craig Griffin, DVM, DACVD. To achieve this when a dog is anesthetized, he advises, use a 3-mm otoscope cone to dilate the ear and place the cone as far into the canal as possible. "You can pass an ear loop down the canal just past the tip of the cone and then fill the cone with cleanser and slowly pull the cone out," he says. This allows a layer of cleanser to be deposited on many canal folds as they fall back in place as the cone is removed.

Owners of pets that require multiple in-clinic ear flushes may be reluctant to allow repeated general anesthetic episodes, Dr. Griffin says. Instead, sedatives and analgesics are sometimes used. "In these cases, even though a patient's laryngeal reflex may be present, it can be suppressed, so take precautions to prevent inhalation pneumonia and avoid spreading resistant *Pseudomonas* species and methicillin-resistant *Staphylococcus* species to the lungs," he advises.

Dr. Griffin also notes that any time you flush an ear with a ruptured tympanic membrane in a sedated dog and an endotracheal tube is not in place, the dog's head should be angled down because the flush can go through the auditory tube to the back of the throat and be aspirated. "We raise the racks on the wet table at one end and the dog is positioned in lateral recumbency with its nose at the low end of the rack," he says.

A Sheltie dog with orange and white fur is captured mid-jump over a blue obstacle made of vertical poles. The dog's mouth is open, and its fur is slightly blurred from motion. The background is a blurred outdoor setting with green grass and other people.

Obstacle #1

Insufficient ear cleaning

"Without a thorough cleaning, any topical medication is less likely to be effective."

—Dr. James Noxon



Obstacle #2

Improper or inadequate treatment

"Shortsightedness by the veterinarian can lead to insufficient treatment. [We] must prevent relapse or recurrence while searching for the underlying cause."

—Dr. James Noxon

Obstacle No. 2: Improper or inadequate treatment

Acute ear infections should be addressed aggressively at the first visit, says Dr. Noxon. The infection should not be allowed to become more chronic in nature.

Recheck exams and cytologies are needed to ensure total resolution of the infection. Ear cytology must be performed on initial examination and with each recheck, Dr. Noxon adds. Partially treated infections can become chronic or, worse, resistant to treatment. Some ear infections may require more than 14 days of treatment despite

many medications being labeled for 7- or 14-day regimens, he says.

Dr. Griffin advises extending the ears when cleaning or treating to elongate and straighten the horizontal and vertical canals; there is a small U-shaped "trap" between the canals that may harbor debris. Also vital to success is using sufficient volumes of cleaner and medication. In medium-sized dogs, the ear can hold about 4 to 6 mL; therefore, 1 mL of medication is insufficient.

Shortsightedness by the veterinarian can lead to insufficient treatment. "Veterinarians must prevent relapse or recurrence while

searching for the underlying cause," Dr. Noxon says, as chronic infections are often initiated by parasites, foreign bodies, hypersensitivities, keratinization disorders, or irritant reactions. These inciting causes can then allow disease states to build with problems such as atopy, *Staphylococcus* or *Malassezia* infection, or dry skin, worsening any original problem. Because of these multifaceted disease states, it is important to treat all components involved while educating the client appropriately.

Do not discontinue antiseptic, antibiotic or antifungal topical therapy until



Practice tip:

Start otitis exams in the waiting room.

—Darin Dell, DVM, DACVD

Ear appointments can be a real pain in the ... well, ear. The pain, fear and anxiety that often accompanies otitis can cause appointments to go from a cakewalk to chaos quickly. To ensure that ear appointments go as smoothly as possible, try starting the examination in the waiting area. Let's walk through it.

First, receptionists start the process by observing the dog in the waiting area. Then, technicians note behaviors when moving the patient to an exam room. Finally, the veterinarian must watch with a keen eye to pick up on subtle movements and actions in the exam room.

All of this helps the veterinarian ask more specific questions, such as:


- > "Our receptionist, Lauren, noticed that Spot was rubbing his head against the chair in the lobby, then whining. Does he do that at home?"
- > "Our technician, Molly, saw Spot with his head tilted a little and veering off to the side when you came to the exam room—have you seen him do this before?"
- > "I realize that Spot may be nervous today, but he seems to be avoiding your hand when you try to pet his head. Is this a change from his usual behavior?"

Make sure to gather as much information from the client and the patient as you can before the physical exam to avoid stressing out an already stressed-out pup.

cytologic examination shows no inflammatory cells or DNA strands. It is common for practitioners or clients to discontinue therapy too early, especially if the ear looks reasonably good and there is no obvious odor or discharge. "I see many cases when I think it is time to discontinue treatment, but because of the results of cytologic examination, I continue," Dr. Griffin says. "Be sure to caution owners to expect that, based on cytology, treatment may need to continue despite the ear looking better, and if all is clear they will be pleased and think you—or they—did a better job than expected."

What factors increase ear-related anxiety?

- > **The breed.** If the breed is typically more anxious at the vet, it's likely going to experience anxiety during an ear appointment.
- > **Time spent suffering.** Not only does this include time spent suffering during the current episode, but the time spent suffering between the previous and current episode of otitis.
- > **The owner's anxiety.** Dogs pick up on their owner's anxiety about cleaning or medicating ears.



Obstacle No. 3: The client compliance conundrum

Another fundamental aspect of successful OE treatment is pet owner compliance. And key to the buy-in? "Extensive communication that includes drawings and models helps clients fully understand the severity of the disease and the importance of their role in treating it," Dr. Noxon says.

Be sure the client understands that simply treating the clinical signs will not help the pet; addressing the underlying cause is what's crucial. Dr. Noxon recommends explaining it this way: "There's a what, and there's a why. The what is what's happening right now. If you treat the what and fail to address the why, the what comes back. If you try to treat the why without treating the what, it appears you have treatment failure, because you still have all that stuff on top that covers things up."



Obstacle #3

The client compliance conundrum

Extensive communication that includes drawings and models helps clients fully understand the severity of the disease and the importance of their role in treating it.

Chronic otitis in dogs:

The clinical consult
you have been
waiting for

The agonizing wait is over. Here, find advice and best practices for diagnosing and treating otitis from veterinary dermatologists around the country.

Chronic otitis plagues dogs across the United States—this is nothing new—but good strategies do exist for both veterinary professionals and pet owners to combat the waiting game that is chronic otitis in dogs. We asked veterinary dermatologists from coast to coast to give us their best diagnostic and treatment advice.

Can you hear me now?

Craig Griffin, DVM, DACVD, says the first thing he does when faced with a dog with chronic otitis is establish whether the dog can hear. If hearing loss seems permanent and irreversible, Dr. Griffin says, then total ear canal ablation and bulla osteotomy become better treatment options. "Hearing loss is the main side effect of these procedures, so if hearing loss were not an issue, I would spend less time and expense trying

medical therapy," he says. "In addition, hearing needs to be assessed before ear flushing and administering topical medications when otitis media is likely."

Dr. Griffin also notes that many owners of dogs with

After explaining how to clean a dog's ears, Dr. James Noxon always asks veterinary clients whether they think they can do it at home. Then comes the critical question for those who say yes: "While you're watching their eyes, ask, 'Will you?' Those are different things."

fairly apparent hearing loss or deafness are unaware of the issue. "Ask the owner about the pet's response to doors, cars pulling up, and

being called when outside and its ability to localize the sound, as well as whether the pet sleeps soundly and anything else that will help determine whether marked hearing loss has occurred," he says.

When assessing hearing in the examination room, make sounds when the dog is not paying attention to you. It's important to not only see the dog respond to the sound—but also to determine whether it almost immediately localizes where the sound comes from.

Culture and sensitivity: to test or not to test?

Dermatologist Wayne Rosenkrantz, DVM, DACVD, doesn't conduct culture and sensitivity testing in every case of otitis externa he sees. "I start with my otoscopic and cytologic examinations and my review of the history of medications



previously used to base my decision on whether culture and sensitivity testing is indicated," he says.

Why not? According to Dr. Rosenkrantz, culture and sensitivity testing does not always isolate the entire bacterial population. It also doesn't always yield accurate sensitivity testing depending on the site or level in the ear from where the sample was taken, he notes. "When I do take samples, I like to put a small amount of sterile saline solution in the ear, massage the canal, aspirate a small

amount of the fluid out, and then use this fluid to do my culture and sensitivity testing."

The compliance conundrum

After explaining how to clean a dog's ears, James Noxon, DVM, DACVIM, always asks veterinary clients whether they think they can do it at home. Then comes the critical question for those who say yes: "While you're watching their eyes, ask, 'Will you?' Those are different things," Dr. Noxon says. "If they

won't, I'm not going to be judgmental, but I need to find something else to do."

Dr. Noxon doesn't worry if the question seems rude to pet owners—what's more important is the result. "My reputation is going to be based on whether they do what I asked them to do," he says. "If it fails, who do you think they blame?"

Avoid otoscope ouches

Forcing the otoscope down the ear canal may result in a good view, but it hurts and leaves a red, raw area



in the canal. This makes the animal sensitive and renders everything that's done afterwards more difficult, says Michael Nappier, DVM, DABVP, assistant professor of community practice in the Department of Small Animal Clinical Sciences at the Virginia-Maryland College of Veterinary Medicine in Blacksburg, Virginia. "Instead of ram-rodging the otoscope," he advises, "extend the ear canal with your hand and adjust the canal to the cone, not the other way around."

The role of corticosteroids

Stephen D. White, DVM, DACVD, professor of medicine and epidemiology at the University of California, Davis School of Veterinary Medicine, says the most common cause of otitis in dogs and cats is an underlying allergy. "It's usually atopic dermatitis or sometimes it's food allergy," he explains. The next most common cause is a severe and difficult-to-clear bacterial infection, such as *Pseudomonas*.

What he notes that veterinarians sometimes don't realize is that even though this is a severe bacterial infection, it's very important to put those dogs on corticosteroids. "We want to reduce inflammation, and steroids will make the dog far more comfortable," he says. If there's swelling of the ear canal, which is common, steroids will reduce that inflammation so the veterinarian has a less painful dog to examine and can do a decent otoscopic exam.

Choosing a topical treatment

In most cases of infectious otitis externa, topical therapy alone is enough, says Lynette Cole, DVM, MS, DACVD, associate professor and section head of dermatology and otology at The Ohio State University College of Veterinary Medicine. When choosing a topical product, Dr. Cole advises considering the chronicity of the condition, the results of your otic examination, and your otic cytology results. The results of cytologic examination of otic exudate are the basis for your selection of the active ingredient. Keep in mind that ointment- or suspension-based otic preparations may not be as effective as those that are solution- or emulsion-based if the ears

are stenotic or hyperplastic, as may be the case in patients with chronic otitis externa, but they can be used if the ears aren't stenotic or hyperplastic or in patients with acute otitis externa.

Choose first-line topical otic medications for cases of acute or occasional otitis externa, reserving second-line otic medications, such as those containing fluoroquinolones, for cases of bacterial otitis due to *Pseudomonas* species or chronic infections that haven't responded to first-line topical otic antimicrobial products.

A team effort

When it comes to an otitis diagnosis, Darin Dell, DVM, DACVD, from the Animal Dermatology Clinic in Indianapolis, Indiana,

recommends involving the entire staff. "Receptionists start the process by observing the dog in the waiting area," Dr. Dell says. "Then, technicians note behaviors when moving the patient to an exam room, and the veterinarian must watch with a keen eye to pick up on subtle movements and actions in the exam room." Any clinical signs noted, such as the patient rubbing its head against a chair in the waiting room, give the veterinarian clues for asking the client more specific diagnostic questions.



Client handouts to the rescue

We developed these educational materials to help your team discuss important topics related to otitis.

Help clients to be better ear-cleaners

It sounds so easy when you say it. But is it so easy when veterinary clients goes home to do it alone? Before you send dog owners home with medicine to put in a patient's ears, make sure you've walked through the steps (and teaching tips) in this handout.

Scan the QR code, right, to download these handouts right now. Then check out dvm360.com/otitistoolkit for these tools and much more!



Solid info on ear issues in pets

"All ear infections are the same, so I can use the same medicine that worked the last time."

"My dog has an ear infection, because he caught it from another animal."

"My dog scratches, licks or chews because he's bored, grooming himself or imitating the family cat."

There's a lot of misinformation out there. Make sure your clients actually know what they're talking about when it comes to their pets' ears, using this handout.

Why **chocolate** might
be especially bad for

Labs' health

By Maureen McKinney, Associate Editorial Director



A recent study found ear and skin disease to be more common in chocolate Labrador retrievers than in black or yellow Labs.

By all accounts, Labrador retrievers make fantastic pets, despite their quirky side (chewing is cute, right?). Smart, playful and devoted, Labs have reigned supreme as the most popular dog breed in the United States since 1991, according to registration statistics from the American Kennel Club.

Like many breeds, Labs are prone to certain health problems, including orthopedic, ophthalmic, endocrinologic and nervous system conditions. But which health problems are the most prevalent? A collaborative study conducted by investigators at the University of Sydney in Australia and the Royal Veterinary College in London addressed this question by examining and comparing the demography, mortality and commonly recorded diseases in Labrador retrievers under veterinary care in the United

Kingdom in 2013, with an eye toward determining whether coat color is associated with disease development.

"This is the first study to include a large number of Labrador retrievers based on records gathered from hundreds of UK vet clinics," said study coauthor Paul McGreevy, BVSc, PhD, MRCVS, MACVS (animal welfare), professor of animal behavior and animal welfare science at the University of Sydney School of Veterinary Science, in a press release about the study. "It provides owners with information on the issues that they should look out for in Labrador retrievers."

Demographics and mortality

Study data were extracted from the VetCompass database, which includes anonymized demographic and clinical data from

Do you know where your clients get their info when it comes to **their dog's skin issues?**



54%
used online
sources



42%
asked
someone

76% of those: asked someone at their veterinary practice

59% of those: asked friends or family



39%
thought about
past experiences/
knowledge



34%
read about it

42% of those: read product literature

37% of those: read a magazine or newspaper

33% of those: read product packaging



6%
saw or heard
an ad

pets throughout the United Kingdom. Of the 455,557 dogs that received veterinary care in 2013, a total of 33,320 (7.3%) were Labrador retrievers, including 15,427 females (46.4%) and 15,252 males (53.6%), with a collective mean body weight of 33 kg (72.8 lb).

Illness and mortality data elicited from a random sample of 2,074 (6.2%) of these Labradors revealed that 1,277 (61.6%) had at least one recorded disorder and 176 died during the study period. Mortality did not differ significantly between male and female Labs, but neutered dogs lived slightly longer than their intact counterparts (12.5 vs. 11.6 years).

Overall, the most commonly reported conditions in the sampled dogs, in order of prevalence, were ear infections (10.4%), overweight/obesity (8.8%), degenerative joint disease (5.5%), lameness (4.4%) and periodontal disease (4.2%).

The most commonly reported conditions in the sampled dogs, in order of prevalence, were ear

infections (10.4%), overweight/obesity (8.8%), degenerative joint disease (5.5%), lameness (4.4%) and periodontal disease (4.2%).

The role of coat color

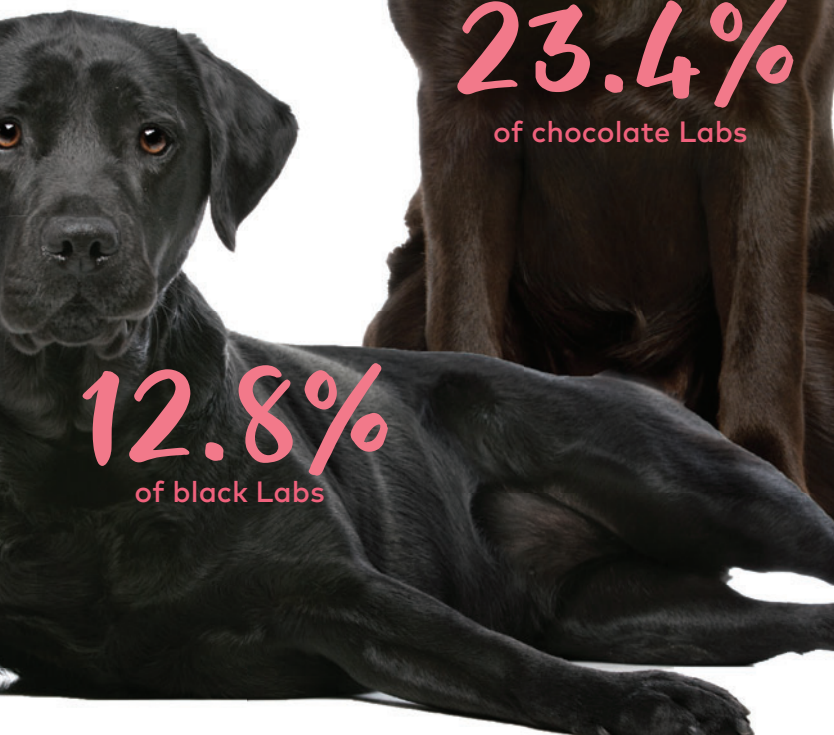
Of the three coat colors recorded for Labrador retrievers in VetCompass, black was the most common, at 44.6% of the Lab population; yellow Labs made up 27.8% and chocolate 23.8%. Data analysis

revealed that chocolate Labs are more prone to certain health conditions than black or yellow Labs. The median overall lifespan for all Labrador retrievers in the database was 12 years, but chocolate Labs lived about two years less than non-chocolate Labs (10.7 vs. 12.1 years). The most common causes of death in the 2,074-dog sample were musculoskeletal disorders and cancer.

Otitis externa was identified in:



In particular, chocolate Labs seemed more prone to skin and ear disease. Otitis externa was identified in 23.4% of chocolate Labs, 17.0% of yellow Labs and 12.8% of black Labs. Likewise, the prevalence of pyotraumatic dermatitis in chocolate Labs (4.0%) was more than double that in black and yellow Labs (1.1% and 1.6%).



Percentage of clients you talked to about dermatology in the last week:



60% scheduled because of a **dermatological issue**
40% scheduled for **preventive care or other reason**

What percentage of clients looking for a dermatological solution end up buying a product from you?

(All, three-quarters, half or quarter?)



6% said a **quarter**
25% said **half**
56% said **three-quarters**
13% said **all**

*Respondents selected all that applied

SOURCE: PET OWNER PATHS, SPONSORED BY MERCK, UNFENCED, KYNETEC



“Breeding for color is questionable.”

The authors speculated that the higher number of dermatologic and otic infections in chocolate Labradors may be the result of genetics. “The chocolate Labs were diagnosed with more otitis and much more skin disease,” Professor McGreevy said in an email to dvm360.

“Whether this reflects

compromised immune responses more generally merits further investigation.”

“The chocolate Labs were diagnosed with more otitis and much more skin disease. Whether this reflects compromised immune responses more generally merits further investigation.”

— Paul McGreevy,
BVSC, PHD, MRCVS, MACVS

Chocolate color is recessive in dogs, meaning that both parents must carry the gene for chocolate color in order for puppies to be chocolate in color. Breeders targeting for the chocolate coat color may be more likely to use only those Labs that carry the chocolate coat gene, and the resultant reduced gene pool may include a higher proportion of genes involved in ear

and skin conditions. Professor McGreevy's take? "Breeding for color is questionable."

Study limitations and implications

Despite the large size of the study, it excluded dogs not in the VetCompass database (i.e., those that didn't receive veterinary care in 2013).

In addition, Professor McGreevy noted, the results relied "entirely on the accuracy of practitioners' diagnoses and the details in the patients' electronic medical records." Therefore, the findings may underestimate the true prevalence of disease in this breed. Nevertheless, the data provide a basis for identifying specific health concerns in Labrador retrievers and offer insight into devising campaigns that could improve the overall health and welfare of this beloved breed.

A moment of insight on otitis

When everyone on your veterinary team is in the know, you're more likely to solve problems. *By Andrew Rollo, DVM*

We are re-educating our staff about pillars, or core topics we want all the staff to know. This renewed interest was spurred by an incident concerning a recent case of otitis.

An elderly couple has a cocker spaniel with chronic ear infections, and we have talked endlessly about food allergies and getting to the root of the problem. They don't want to do anything except treat the infection.

At the receptionist meeting yesterday, one of the receptionists said that at checkout this client mentioned how she applies the medication, which is basically at the outer pinnae. She thus discovered that the owner had not been applying the medication appropriately, which she would not have caught until a few weeks ago when she heard my ear care talk.

She was able to step in on the spot and instruct the owner on how to apply the medications appropriately—something that obviously has been lost in translation with myself, the technicians and the owners. So maybe this dog doesn't have underlying allergies and just had an ongoing infection we had never treated to completion. A good example of why you invest in team education.



Dig into these
instant otitis



We asked our dvm360 Instagram followers for some tips on managing otitis. Lend your ears—or your patients' ears—to these nuggets of advice from your veterinary colleagues.

Tip 1: "I place a small amount of cotton in both ears before bathing to help prevent water from accumulating in the horizontal ear canal. After the bath, I remove the cotton and follow up with an ear cleanser that contains a drying agent."

Tip 2: "I use cytologic examination to determine whether the infection is primarily yeast or bacteria, and treat accordingly. For example, I prescribe either an antifungal or antibacterial otic flush once a day for seven days, instruct owners to let the ears dry thoroughly for 30 minutes, then apply a combination antifungal/antibacterial/corticosteroid otic suspension twice a day for 10 days."

Tip 3: "We prescribe a ceruminolytic flush every other day, and we also combine 15 ml of the flush with 15 ml of a combination antibiotic/antifungal/anti-inflammatory ointment and tell owners to place a small amount in both ears once a day for 10 days."

Posts & tweets about otitis externa





Baytril® Otic

(enrofloxacin/silver sulfadiazine)
Antibacterial-Antimycotic Emulsion

For Otolopical Use In Dogs

Caution: Federal (U.S.A.) Law restricts this drug to use by or on the order of a licensed veterinarian.

▶ Federal law prohibits the extra label use of this drug in food-producing animals. ◀

PRODUCT DESCRIPTION:

Each milliliter of Baytril® Otic contains: enrofloxacin 5 mg (0.5% w/v), silver sulfadiazine (SSD) 10 mg (1.0% w/v), benzyl alcohol (as a preservative) and cetystearyl alcohol (as a stabilizer) in a neutral oil and purified water emulsion. The active ingredients are delivered via a physiological carrier (a nonirritating emulsion).

MICROBIOLOGY:

In clinical field trials, Baytril® Otic demonstrated elimination or reduction of clinical signs associated with otitis externa and *in vitro* activity against cultured organisms. Baytril® Otic is effective when used as a treatment for canine otitis externa associated with one or more of the following organisms: *Malassezia pachydermatis*, coagulase-positive *Staphylococcus* spp., *Pseudomonas aeruginosa*, *Enterobacter* spp., *Proteus mirabilis*, *Streptococci* spp., *Aeromonas hydrophila*, *Aspergillus* spp., *Klebsiella pneumoniae*, and *Candida albicans*.

INDICATIONS:

Baytril® Otic is indicated as a treatment for canine otitis externa complicated by bacterial and fungal organisms susceptible to enrofloxacin and/or silver sulfadiazine (see Microbiology section).

EFFECTIVENESS:

Due to its combination of active ingredients, Baytril® Otic provides antimicrobial therapy against bacteria and fungi (which includes yeast) commonly encountered in cases of canine otitis externa.

CONTRAINDICATIONS:

Baytril® Otic is contraindicated in dogs with suspected or known hypersensitivity to quinolones and/or sulfonamides.

HUMAN WARNINGS:

Not for human use. Keep out of the reach of children. Avoid contact with eyes. In case of contact, immediately flush eyes with copious amounts of water for 15 minutes. In case of dermal contact, wash skin with soap and water. Consult a physician if irritation develops or persists following ocular or dermal exposures. Individuals with a history of hypersensitivity to quinolone compounds or antibacterials should avoid handling this product. In humans, there is a risk of user photosensitization within a few hours after excessive exposure to quinolones. If excessive accidental exposure occurs, avoid direct sunlight.

PRECAUTIONS:

The use of Baytril® Otic in dogs with perforated tympanic membranes has not been evaluated. Therefore, the integrity of the tympanic membrane should be evaluated before administering this product. If hearing or vestibular dysfunction is noted during the course of treatment, discontinue use of Baytril® Otic.

Quinolone-class drugs should be used with caution in animals with known or suspected Central Nervous System (CNS) disorders. In such animals, quinolones have, in rare instances, been associated with CNS stimulation which may lead to convulsive seizures.

Quinolone-class drugs have been associated with cartilage erosions in weight bearing joints and other forms of arthropathy in immature animals of various species.

The safe use of Baytril® Otic in dogs used for breeding purposes, during pregnancy, or in lactating bitches, has not been evaluated.

ADVERSE REACTIONS:

During clinical trials, 2 of 113 (1.7%) dogs exhibited reactions that may have resulted from treatment with Baytril® Otic. Both cases displayed local hypersensitivity responses of the aural epithelium to some component within the Baytril® Otic formulation. The reactions were characterized by acute inflammation of the ear canal and pinna.

For medical emergencies or to report adverse reactions, call 1-800-422-9874. For customer service or to obtain product information, including Material Safety Data Sheet, call 1-800-633-0736.

SAFETY:

General Safety Study:

In a target animal safety study, Baytril® Otic was administered in both ears of 24 clinically normal beagle dogs at either recommended or exaggerated dosages: 10, 30 or 50 drops applied twice daily for 42 consecutive days. A control group of 8 beagle dogs was treated by administering 50 drops of vehicle in one ear twice daily for 42 consecutive days, with the contralateral ear untreated. Erythema was noted in all groups, including both treated and untreated ears in the controls, which resolved following termination of treatment.

Oral Safety Study:

In order to test safety in case of ingestion, Baytril® Otic was administered, twice daily for 14 consecutive days, to the dorsum of the tongue and to the left buccal mucosa of 6 clinically normal dogs. No adverse local or systemic reactions were reported.

DOSAGE AND ADMINISTRATION:

Shake well before each use.

Tilt head so that the affected ear is presented in an upward orientation. Administer a sufficient quantity of Baytril® Otic to coat the aural lesions and the external auditory canal. As a general guide, administer 5-10 drops per treatment in dogs weighing 35 lbs. or less and 10-15 drops per treatment in dogs weighing more than 35 lbs. Following treatment, gently massage the ear so as to ensure complete and uniform distribution of the medication throughout the external ear canal. Apply twice daily for a duration of up to 14 days.

Bayer HealthCare, LLC
Animal Health Division
Shawnee Mission, Kansas 66201 U.S.A.
NADA # 141-176, Approved by FDA

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Bayer

Help clients understand what could be causing their pet's head-shaking and ear-scratching through social media. Find these tools and many more at dvm360.com/otitistoolkit.



It's a common belief that only droopy-eared dogs get ear infections, but that's not true! Even dogs with pointy ears can get them. [#petsears](#) [#healthypets](#)



Does your dog scratch his ears or shake his head? Is there a discharge or foul odor coming from his ears? If so, he might have an ear infection. Call us today and we'll take a look! [#healthypets](#)



If a dog has had multiple ear infections, the ear anatomy can change and make it more likely for him to get infections in the future. [#healthypets](#)



Ear infections affect 14-20% of dogs. If your dog scratches his ears, shakes his head or has a foul ear odor, he may be one of them. [#healthypets](#)





BLOOD, SWEAT AND

EARS



BAYTRIL® OTIC

FEATURING ENROFLOXACIN
★ WITH SPECIAL GUEST ★
SILVER SULFADIAZINE

VS

★ THE ★
PSEUDOMONAS OTTIS OF
CHARLIE
“JAWS”
MALONE

BAYTRIL® OTIC
(ENROFLOXACIN/SILVER SULFADIAZINE)
ANTIBACTERIAL-ANTIMYCOTIC EMULSION

FIGHT NASTY

CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian. Federal law prohibits the extra label use of this drug in food-producing animals. CONTRAINDICATIONS: Baytril® Otic is contraindicated in dogs with suspected or known hypersensitivity to quinolones and/or sulfonamides.

products are they purchasing at their local pet store or big-box store? Which products are your doctors recommending that you don't carry yet?

Make a list of items and then decide what will fit in the space you've created. Research pricing on those items at local pet stores and online retailers to get an idea of the average price. Markup on these items will be minimal, so it's important to price appropriately.

Step 3. Purchase and make it pretty

Talk to your vendor reps about the products you're looking for. Many reps will offer specials and buy-one-get-one-free offers to bring in new products. Educate yourself on return policies and product guarantees as well. If a dental chew comes with a 100% money-back guarantee, a client may be more motivated to give it a try.

Once you have new products in stock, get to organizing them by category and stock the shelves accordingly: nutraceuticals, dental care items, toys, grooming supplies, food and treats.

Make sure each product is clearly priced and displayed neatly.

If you have the space, allow one section for seasonal items to be rotated on a regular basis.

Step 4. Educate, then delegate

Your staff is already in the habit of promoting flea, tick and heartworm preventives and other hospital services. Look at your retail space as an extension of those services, and make sure your staff—especially the front desk team—is educated on the products you offer. They can't sell what they don't know.

In an ideal world, one of your team could take on the duties of a retail manager. (Are you a team member reading this? That's you!) Maybe one of the veterinary assistants has a background in retail or one of the receptionists is exceptionally good at getting clients to purchase a full year of preventive after annual exams. Task this team member with making sure the retail space stays organized, clean and stocked.

Step 5. Monitor and motivate

The retail manager should regularly monitor inventory turnover and should be open to changing the products until the hospital finds the right ones.

Partnering with reps and knowing return policies will help prevent loss and allow you to fine-tune that retail space.

The practice manager, or better yet the person taking on the duties of retail manager, can motivate the team by including retail products in sales challenges or productivity goals. As a manager, I'm always looking for a way to better track productivity from my front desk staff, and retail add-on purchases is one way to do it.

Overall, retail items are fun, so encourage everyone to have fun recommending them, talking about them and selling them to pet owners. You may grow proud of your newest profit center, even if it is just a little shelf in the corner.

Sara Karasinski is practice manager of Arrow Veterinary Clinic in Lowell, Michigan, as well as a member of the Veterinary Hospital Managers Association.



Great CE, great food and great fun in Kansas City!

With tons of sessions just for managers, you'll get everything you need to run your practice and manage your team—and have just a little bit of fun in the process. For more, head to fetchdvm360.com/KC.



This isn't *Mean Girls*: Let's talk woman-to-woman bullying in practice

Raise your hand if you've ever felt personally victimized by another woman in your clinic. Days in veterinary practice can sometimes feel like a scene out of *Mean Girls*. How do we change that?

By Oriana D. Scislowicz, BS, LVT, aPHR

Ladies, how familiar does this scenario sound? There's that one coworker who belittles your ideas or takes over your work without asking. The really disappointing part? Since most of the profession is made up of women, it's not just workplace bullying that's happening, it's a prominence of woman-to-woman bullying.

While males often equate bullying with punching, kicking or hitting, female aggression tends to be more subtle—and often verbal—from a young age. Women try to bring other women down using exclusion, gossip and rumor spreading, along with ignoring and antagonistic body language. So while your female coworker isn't physically pushing you around, and probably hasn't created a "Burn Book" of nasty comments about your team, they may still be trying to push you out of the inner circle.

Women have the same motivators as men for this behavior—a natural human desire for power and control, paired with feelings of jealousy, fear or competition. And when it comes to picking their target's

gender, women often tend to go for other women, as they feel girls were raised differently, and have a lesser chance of being confrontational or

ees dismissing negative behavior between women as being bound to occur just due to the nature of their gender. The brushing it off as "it's just a girl thing" mentality is damaging to our female workplace culture and is, in part, being perpetuated by ourselves.

We're taught that it's normal to bicker with one another from an early age, then as teens start calling other young women "catty" or "bitchy." That language and mentality often carries into adulthood. When a man slights a woman, the behavior is usually the focus. However, when we hear one woman complain of another female coworker, it's not just the behavior that's being discussed—the individual's entire identity is encapsulated by those derogatory female terms.



responding with aggression than a man might.

This behavior is also accepted as a norm within groups of women.

In my time as a technician as well as a manager, I can't count the number of times I've heard comments from female employ-

With fewer opportunities for women to advance (there were 24 female CEOs in the Fortune 500 in 2018—that's just under 5% of the total list), women may act in an overly aggressive manner to their female counterparts for the sake of competition. With this mentality, women are more hesitant to encourage each other in the workplace as they worry it may jeopardize their career. If we're so focused on demeaning each other, how are we going to help our gender grow and break through the glass ceiling?

When this behavior occurs, it affects our ability to trust one another and feel that we can be open in our work relationships. If we don't

start addressing it head-on, this cycle isn't likely to be broken and the sabotage will only continue. To help stop this behavior in your own workplace, initiate a kudos system among your coworkers, and make an effort to acknowledge your female coworkers' hard work and efforts. Send a friendly email or text to comment on a strength of theirs or just to show appreciation. If you work in a toxic environment with a lot of woman-to-woman negativity, it can be surprisingly cathartic to rise above the backstabbing and gossip and introduce some positivity.

Remember, when you're addressing the issues, focus on the

behavior, not labeling the individual. Are they name-calling, gossiping, withholding information or resources, huffing, rolling their eyes or turning their back to you? Identifying the actions can better help that individual change, and also help squash the tendency for the behavior to be labeled as something else solely because it's coming from a woman. Discuss the behaviors head-on and be sure you're firm. If you're still not getting anywhere, pull in a manager to help mediate the conversation.

Oriana D. Scislowicz, BS, LVT, aPHR, is a Firstline Editorial Advisory Board member and regional manager at CVCA Cardiac Care for Pets in Richmond, Virginia.





From fractious to fine: How to control those **crazed cats**

When you have fractious cats running amok in your veterinary clinic, what's the best way to restrain them? We have a few ideas.

It's a fact that every veterinary professional knows well: Cats have 32 muscles in each ear to help them ignore you. With the fractious kitties of the world attempting to take over your clinic, you're left with few options of restraint and control. Don't worry, we've got a few options to help you out.

Restraint? It's in the bag

Jorgensen Laboratories brings you nylon cat restraining bags designed for proper restraint of those fractious cats in your clinic. The bags give you front and rear access from a two-way zipper running the full length. It also comes equipped with a Velcro collar and front leg openings that can quickly and efficiently close. The bags are washable and waterproof, and the pull-tab zipper flap ensures that no kitty fur gets caught in the process.

Nabbing cats from cages just got easy

You've got a fractious cat in a cage that you need to remove without harming yourself, your patient or your staff. Yikes. Luckily, Campbell Pet Company has you covered with this durable, washable capture net. With the EZ-Nabber, you can safely transfer a cat to another cage, place them into their carrier, give injections and hold onto while you clean and flush abscesses and wounds.

Keep those cats fenced

When your feline patients become a little too ambitious, they can reach greater heights than any other animal you care for—no, really. Stop cats from climbing over fences and up trees with Cat Fence-In. It fits any height of wood, vinyl, masonry, wire or chain-link fence. It keeps patients in and

keeps strays out. The combination barrier prevents cats from jumping or climbing to the top of the fence, since the netting is between the cat and his landing place.

For more informations on these products, visit dvm360.com/crazedcats.

Want to see more products? We've got 'em all here!

You want it, we got it. Check out our marketplace for every product you need as a veterinary professional at marketplace.dvm360.com

BRAVECTO[®]
(FLURALANER)
TOPICAL SOLUTION



Pet owners already have a lot to remember.
Give them **one less thing to forget.**

Only BRAVECTO[®] delivers **up to 12 weeks*** of flea & tick protection with one topical dose

Fewer doses = fewer potential gaps in protection = less stress for cats, pet owners, staff.¹

Ask your Merck Animal Health Rep about BRAVECTO or Visit Bravectovets.com

*BRAVECTO kills fleas and prevents flea infestations for 12 weeks. **BRAVECTO Topical Solution for Cats** kills ticks (black-legged tick) for 12 weeks and American dog ticks for 8 weeks.

¹BRAVECTO Topical Solution for Cats [prescribing information]. Madison, NJ: Merck Animal Health; 2016.

IMPORTANT SAFETY INFORMATION:

BRAVECTO Topical Solution for Cats: The most common adverse reactions recorded in clinical trials were vomiting, itching, diarrhea, hair loss, decreased appetite, lethargy, and scabs/ulcerated lesions. BRAVECTO has not been shown to be effective for 12-weeks' duration in kittens less than 6 months of age. BRAVECTO is not effective against American dog ticks beyond 8 weeks of dosing. For topical use only. Avoid oral ingestion. The safety of BRAVECTO has not been established in breeding, pregnant and lactating cats. Use with caution in cats with a history of neurologic abnormalities. Neurologic abnormalities have been reported in cats receiving BRAVECTO, even in cats without a history of neurologic abnormalities.

See full Prescribing Information on page 20.



(fluralaner topical solution) for Cats

Caution:

Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian.

Description:

Each tube is formulated to provide a minimum dose of 18.2 mg/lb (40 mg/kg) body weight. Each milliliter contains 280 mg of fluralaner.

The chemical name of fluralaner is (±)-4-[5-(3,5-dichlorophenyl)-5-(trifluoromethyl)-4,5-dihydroisoxazol-3-yl]-2-methyl-N-[2-oxo-2-[2,2,2-trifluoroethylamino]ethyl]benzamide. Inactive ingredients: dimethylacetamide, glycolfuro, diethyltoluamide, acetone

Indications:

Bravecto kills adult fleas and is indicated for the treatment and prevention of flea infestations (*Ctenocephalides felis*) and the treatment and control of *Ixodes scapularis* (black-legged tick) infestations for 12 weeks in cats and kittens 6 months of age and older, and weighing 2.6 pounds or greater.

Bravecto is also indicated for the treatment and control of *Demodex variabilis* (American dog tick) infestations for 8 weeks in cats and kittens 6 months of age and older, and weighing 2.6 pounds or greater.

Dosage and Administration:

Bravecto should be administered topically as a single dose every 12 weeks according to the **Dosage Schedule** below to provide a minimum dose of 18.2 mg/lb (40 mg/kg) body weight.

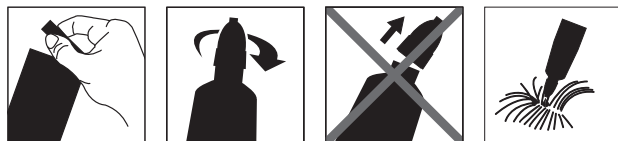
Bravecto may be administered every 8 weeks in case of potential exposure to *Demodex variabilis* ticks (see **Effectiveness**).

Dosage Schedule:

Body Weight Ranges (lb)	Fluralaner content (mg/tube)	Tubes Administered
2.6 – 6.2	112.5	One
>6.2 – 13.8	250	One
>13.8 – 27.5*	500	One

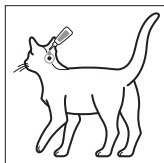
* Cats over 27.5 lb should be administered the appropriate combination of tubes.

Step 1: Immediately before use, open the pouch and remove the tube. Hold the tube at the crimped end with the cap in an upright position (tip up). The cap should be rotated clockwise or counter clockwise one full turn. The cap is designed to stay on the tube for dosing and should not be removed. The tube is open and ready for application when a breaking of the seal is felt.



Step 2: The cat should be standing or lying with its back horizontal during application. Part the fur at the administration site. Place the tube tip vertically against the skin at the base of the skull of the cat.

Step 3: Squeeze the tube and gently apply the entire contents of Bravecto directly to the skin at the base of the skull of the cat. Avoid applying an excessive amount of solution that could cause some of the solution to run and drip off of the cat. If a second spot is needed to avoid run off, then apply the second spot slightly behind the first spot.



Treatment with Bravecto may begin at any time of the year and can continue year round without interruption.

Contraindications:

There are no known contraindications for the use of the product.

WARNINGS

Human Warnings:

Not for human use. Keep this and all drugs out of the reach of children.

Do not contact or allow children to contact the application site until dry.

Keep the product in the original packaging until use in order to prevent children from getting direct access to the product. Do not eat, drink or smoke while handling the product. Avoid contact with skin and eyes. If contact with eyes occurs, then flush eyes slowly and gently with water. **Wash hands and contacted skin thoroughly with soap and water immediately after use of the product.**

The product is highly flammable. Keep away from heat, sparks, open flame or other sources of ignition.

Precautions:

For topical use only. Avoid oral ingestion. (see **Animal Safety**).

Use with caution in cats with a history of neurologic abnormalities. Neurologic abnormalities have been reported in cats receiving Bravecto, even in cats without a history of neurologic abnormalities (see **Adverse Reactions**).

Bravecto has not been shown to be effective for 12-weeks duration in kittens less than 6 months of age. Bravecto is not effective against *Demodex variabilis* ticks beyond 8 weeks after dosing (see **Effectiveness**).

The safety of Bravecto has not been established in breeding, pregnant and lactating cats.

Adverse Reactions:

In a well-controlled U.S. field study, which included a total of 161 households and 311 treated cats (224 with fluralaner and 87 with a topical active control), there were no serious adverse reactions.

Percentage of Cats with Adverse Reactions (AR) in the Field Study

Adverse Reaction (AR)	Bravecto Group: Percent of Cats with the AR During the 105-Day Study (n=224 cats)	Control Group: Percent of Cats with the AR During the 84-Day Study (n=87 cats)
Vomiting	7.6%	6.9%
Pruritus	5.4%	11.5%
Diarrhea	4.9%	1.1%
Alopecia	4.9%	4.6%
Decreased Appetite	3.6%	0.0%
Lethargy	3.1%	2.3%
Scabs/Ulcerated Lesions	2.2%	3.4%

In the field study, two cats treated with fluralaner topical solution experienced ataxia. One cat became ataxic with a right head tilt 34 days after the first dose. The cat improved within one week of starting antibiotics. The ataxia and right head tilt, along with lateral recumbency, reoccurred 82 days after administration of the first dose. The cat recovered with antibiotics and was redosed with fluralaner topical solution 92 days after administration of the first dose, with no further abnormalities during the study. A second cat became ataxic 15 days after receiving its first dose and recovered the next day. The cat was redosed with fluralaner topical solution 82 days after administration of the first dose, with no further abnormalities during the study.

In a European field study, two cats from the same household experienced tremors, lethargy, and anorexia within one day of administration. The signs resolved in both cats within 48-72 hours.

In a European field study, there were three reports of facial dermatitis in humans after close contact with the application site which occurred within 4 days of application.

For technical assistance or to report a suspected adverse drug reaction, or to obtain a copy of the Safety Data Sheet (SDS), contact Merck Animal Health at 1-800-224-5318. Additional information can be found at www.bravecto.com. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or online at <http://www.fda.gov/AnimalVeterinary/SafetyHealth>.

Clinical Pharmacology:

Peak fluralaner concentrations are achieved between 7 and 21 days following topical administration and the elimination half-life ranges between 11 and 13 days.

Mode of Action:

Fluralaner is for systemic use and belongs to the class of isoxazoline-substituted benzamide derivatives. Fluralaner is an inhibitor of the arthropod nervous system. The mode of action of fluralaner is the antagonism of the ligand-gated chloride channels (gamma-aminobutyric acid (GABA)-receptor and glutamate-receptor).

Effectiveness:

In a well-controlled European laboratory study, Bravecto killed 100% of fleas 8 hours after treatment and reduced the number of live fleas on cats by > 98% within 12 hours after treatment or post-infestation for 12 weeks. In well-controlled laboratory studies, Bravecto demonstrated > 94% effectiveness against *Ixodes scapularis* 48 hours post-infestation for 12 weeks. Bravecto demonstrated > 98% effectiveness against *Demodex variabilis* 48 hours post-infestation for 8 weeks, but failed to demonstrate ≥ 90% effectiveness beyond 8 weeks.

In a well-controlled U.S. field study, a single dose of Bravecto reduced fleas by ≥99% for 12 weeks. Cats with signs of flea allergy dermatitis showed improvement in erythema, alopecia, papules, scales, crusts, and excoriation as a direct result of eliminating flea infestations.

Animal Safety:

Margin of Safety Study: In a margin of safety study, Bravecto was administered topically to 11- to 13-week (mean age 12 weeks)-old-kittens at 1, 3, and 5X the maximum labeled dose of 93 mg/kg at three, 8-week intervals (8 cats per group). The cats in the control group (0X) were treated with mineral oil.

There were no clinically-relevant, treatment-related effects on physical examination, body weights, food consumption, clinical pathology (hematology, clinical chemistries, coagulation tests, and urinalysis), gross pathology, histopathology, or organ weights. Cosmetic changes at the application site included matting/clumping/spiking of hair, wetness, or a greasy appearance.

Oral Safety Study: In a safety study, one dose of Bravecto topical solution was administered orally to 6- to 7-month-old-kittens at 1X the maximum labeled dose of 93 mg/kg. The kittens in the control group (0X) were administered saline orally. There were no clinically-relevant, treatment-related effects on physical examination, body weights, food consumption, clinical pathology (hematology, clinical chemistries, coagulation tests, and urinalysis), gross pathology, histopathology, or organ weights. All treated kittens experienced salivation and four of six experienced coughing immediately after administration. One treated kitten experienced vomiting 2 hours after administration.

In a well-controlled field study Bravecto was used concurrently with other medications, such as vaccines, anthelmintics, antibiotics, steroids and sedatives. No adverse reactions were observed from the concurrent use of Bravecto with other medications.

Storage Conditions:

Do not store above 77°F (25°C). Store in the original package in order to protect from moisture. The pouch should only be opened immediately prior to use.

How Supplied:

Bravecto is available in three strengths for use in cats (112.5, 250, and 500 mg fluralaner per tube). Each tube is packaged individually in a pouch. Product may be supplied in 1 or 2 tubes per carton.

NADA 141-459, Approved by FDA

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Rev. 09/16



Leptospirosis vaccine: Every dog, every time?

Are today's veterinarians recommending leptospirosis vaccines for every canine patient? The answer is no, but, boy, are the numbers up. See if your hospital is keeping with the times ...

Once upon a time, veterinarians might have had a nuanced view about the need for leptospirosis vaccines for all canine patients. Why give a vaccine for something a dog just wouldn't be exposed to? But circumstances have changed: more exposure, changing climates, better vaccines.

While you likely don't make the decisions about when a vaccine is right in a medical case, you do help educate clients, watch for signs and prepare to talk at least a little about this significant risk and the important vaccine that helps. Here are what three clinicians have to say about making the right choice on leptospirosis vaccines for dogs. And don't miss the final takeaways for veterinary team members at the end!

The public-health vets

"Leptospirosis is a vaccine-preventable disease, and the serovars are considered cross-protective. Because of recent outbreaks in urban areas such as Portland, Oregon, (think anti-vaxxers and hipsters with backyard chickens that attract lepto-carrying rats) and the zoonotic potential of the disease, Dr. Emilio DeBess' current recommendations are that all dogs should be vaccinated against leptospirosis. Period." — Sarah Wooten, DVM, writing about a Fetch dvm360 session taught by Ohio State Veterinarian Emilio DeBess. (Read the full synopsis on the next page!)

The specialty doctor

"My general thoughts are: If your canine patient population is at risk for leptospirosis, then the annual, four-serovar is recommended. This isn't just for hunting dogs that live in rural areas anymore.



With the changing demographics of dogs at risk (small dogs, inner city and so on), global warming and lack of vaccination and protection in many dogs now, we are seeing increased prevalence of leptospirosis.

"It's really important to discuss the risks with pet owners. As a criticalist, I don't 'do vaccines,' but even my dog is vaccinated for lepto; my dog is high-risk: loves to swim, in Minnesota by the Mississippi River, lives in the city and hikes with me a lot." — Justine Lee, DVM, DACVECC, DABT, from

Animal Emergency and Referral Center of Minnesota.

The general-practice owner

"This isn't too nuanced of an answer. This is a contagious and potentially fatal disease prevalent in most parts of this country. We used to hesitate in the past (sometimes) to give this vaccine in small breed dogs, because they seemed to be somewhat reactive to the vaccine. Things have changed over the last five or so years. Leptospirosis is now more prevalent, and vaccines are safer. Bottom line, you always want to vaccinate based on pet lifestyle, but there's no other way than to say this is a core vaccine for just about all dogs." — Jeff Rothstein, DVM, MBA, at Progressive Pet Animals Hospitals in Michigan.

That's Dr. Rothstein's bottom line. Our bottom line?

If you're a receptionist, think twice before downplaying the importance of any vaccine when a client asks you if it's really necessary. We here at dvm360 know there's been quite a few years of vaccine skepticism in human medicine, but don't let that cloud your opinion when it comes to other species. Trust the veterinarians on this.

If you're a veterinary technician, and you didn't get on the leptospirosis bandwagon (and maybe rolled your eyes or shook your head sadly at an every-dog vaccination protocol), talk to a few experts and see if it's time to change your mind.

Not your grandpa's canine leptospirosis cases

My how things have changed! Here's new thinking about which dogs to suspect this infectious disease in, how to prevent it and more.

By Sarah J. Wooten, DVM

Historically, leptospirosis has been considered a disease primarily associated with dogs that live in or travel to rural areas, wet areas or areas frequented by wildlife. At a recent Fetch dvm360 session, Oregon State public health veterinarian Emilio DeBess, DVM, MPVM, said the game has changed and veterinary professionals need to know about and communicate the new risk factors to their veterinary clients. Instead of the risk factors mentioned above (which are, of course, still valid), now the main risk factors for leptospirosis include small-breed dogs (that indoor Yorkie that lives in a purse and never touches the ground), dogs that live in urban areas and unvaccinated dogs. In his experience, 50% of dogs currently diagnosed with leptospirosis have no known exposure.

What do you really need to know about leptospirosis in private practice? Read on.

The clinical signs, they are a changin'

Before, the clinical signs associated with leptospirosis included signs of liver disease, but according to Dr. DeBess, less than 12% of patients with leptospirosis present icteric. One study found that most patients present with nonspecific flu-like signs, including lethargy, inappetence, vomiting and fever. The most common laboratory finding in a clinical setting is mild to moderate azotemia.

Treat those lepto suspects

Dr. DeBess makes no bones about it: If you suspect leptospirosis, treat for it and protect your team and other dogs in the hospital from a highly contagious disease. Instead of worrying about serovar titers, Dr. DeBess says to worry about:

1. Protecting other dogs in the clinic from leptospirosis. The urine of infected animals is considered highly infectious.
2. Protecting your team. Label the cage "Lepto suspect" and isolate the patient as necessary. Prevent contact with mucous membranes, and wear gloves and protective clothing when handling the animal or cleaning the cage.

Dr. DeBess says the first 72 hours are the time for highest vigilance: Animals are considered to be non-infectious and non-shedding after three days of receiving antibiotics. Luckily, leptospirosis in the environment is easy to kill: Clean surfaces with a solution of soap, water and bleach. At home, hot water, exposure to sunlight and washing bedding will also kill the organism.

3. Preserving the patient's well-being. A delay in suspecting the infection is the major cause of death by canine leptospirosis, and 80% of patients without signs of severe respiratory complications that are treated appropriately recover.

Overcoming the worriers

A quick Google search will show you that there is still a prevailing belief that leptospirosis vaccines have a

high reaction rate. As reported in the 2010 ACVIM consensus statement on leptospirosis, one study that looked at acute vaccine reactions in a large database of dogs found that vaccines that contained leptospiral antigen were no more reactive than other canine vaccines. If your clients still push back, Dr. DeBess says to tell them that the leptospirosis vaccine is a killed vaccine and is no more risky than a rabies vaccine.

Leptospirosis is a vaccine-preventable disease, and the serovars are considered cross-protective. Because of recent outbreaks in urban areas such as Portland, Oregon, and the zoonotic potential, Dr. DeBess' current recommendations are that all dogs should be vaccinated.

Dogs that have been diagnosed with and treated for leptospirosis should also be vaccinated. Dr. DeBess advises to wait until the dog is healthy and the two-week course of antibiotics is finished to begin the two booster vaccine series.

Want to see the full article and references? Head over to dvm360.com/grandpas-lepto.



This Mother's Day, treat yourself!

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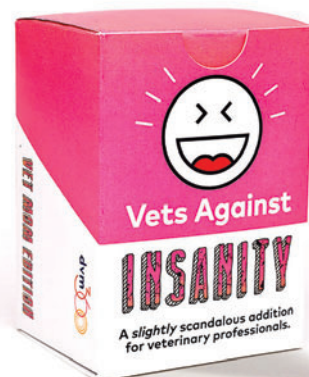
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It's _____

Your weird,
floppy stomach



Improving veterinary visits for senior dogs and cats

Instead of teaching an old dog new tricks, try learning some yourself! Here are a few things you can do to improve visits for aging pets.

By Amy Newfield, CVT, VTS (ECC)

Senior pets are amazing, and, in my opinion, rarely get the credit they deserve. To start, compared to juvenile cats and dogs, most senior pets have an understanding of veterinary clinics. Because of that, they tend to be more tolerant to procedures like catheters, blood draws and even hospitalization. To return the favor, here are some tips to help you better understand (and care for) senior patients.

Handling diminished senses

Sight

As dogs and cats age, their ability to see in the dark diminishes, making them more sensitive to light changes around them and causing them to frequently bump into walls. Older pets also experience diminished depth perception, and their eyes can lose the ability to process how fast objects are moving. Coming into a practice from the sunny outdoors can even cause problems. Take a moment when walking or carrying a senior patient from a light room to a darker space (i.e. the radiology room). If the pet puts on the breaks, don't try to force them in to the darker room. Instead, take time to let their eyes adjust.

Sound

Talking to pets is one of the primary ways we communicate with them, but old age shrinks pets' ability to hear. To combat this, make sure senior patients can always see you to prevent startling them. Getting in front of patients before picking them up may be the difference between a bite or a lick. If the pet is facing the back of the cage, move their blankets and let them know you're there before reaching in.

Taste

Loss of taste buds and changes in taste also come

with old age. Diseases, especially those that are dental and renal in nature, can make food taste bad, causing the pet to eat very little. Next time you have an older patient that doesn't want to eat, try warming up their food. If that doesn't work, you may need to try multiple foods to find what their taste buds will tolerate.

Smell

Humans have approximately five million receptors in their nasal passages to process smell. Cats have around 80 million. Dogs top the charts at 300 million, which is why they rely on this sense the most. We don't know exactly what happens to their sense of smell as they age, but likely it also diminishes to some degree. Senior pets experiencing upper respiratory or airway issues may have lower appetites. Since the sense of smell directly correlates to taste, again, you may need to warm up the patient's food or provide more enticing meals.

Improving senior care

Behavior

Elderly dogs and cats can suffer from an Alzheimer's-like disease called canine cognitive dysfunction (CCD). A recent UC Davis study revealed that CCD effects between 14 to 22 percent of senior dogs. Pets diagnosed with CCD can become disoriented, experience changes in sleep pattern (i.e. being more awake in the evening), forget house



Amy Newfield's dog Meeko, who turns 15 years old this month.

training behavior and develop anxiety or compulsive behaviors.

Senior patients with CCD or experiencing senility may be more confused and disoriented in a hospital setting. Cats may forget to use the litter box or be unable to climb into it. In my experience, most senior cats urinate on themselves in a hospital setting. Making hideaway boxes for older felines or putting them in a quiet area can help reduce their levels of confusion or frustration. Using low-access litter boxes can help with these bathroom issues.

Older dogs tend to vocalize or pace if they're disoriented. Sometimes older dogs can snap or become aggressive out of fear and disorientation. Talk to the dog using familiar words, have a scent object from the owner or use foods to help calm the patient.

Arthritis

Vocalization is rare when it comes to arthritis in pets. Older cats might cry when they are picked up and scruffing should be avoided. Tugging the back legs for blood samples from the medial saphenous vein could be painful and laying the cat on its side for a radiograph may elicit aggression.

Small dogs may try to bite when picked up. Older dogs may yelp when forced into down position. Rolling a vein on a front leg for a catheter could be painful for a pet with elbow arthritis. Allow the pet to stand and use less restraint if possible. Also, a nicer bed equals a happier, more comfortable pet that's more likely to sleep and therefore heal faster. Clinics should consider investing in foam or orthopedic beds.

Anesthesia

Senior pets can have postoperative cognitive dysfunction (POCD), causing them to be confused,

agitated, aggressive or depressed when waking up from anesthesia. In 2008, Duke University released a study showing that human, geriatric adults can experience POCD signs for up to three months after being given anesthesia.¹

The study sampled over a thousand adults with ages ranging from young to old. All participants were given memory tests before and after anesthesia. About 36% to 41% of participants experienced some form of POCD immediately following the procedure. All participants had fully recovered after three months, except those who were 60 years or older; 12.7% of the population 60 years old and higher still experienced POCD symptoms after three months.

A similar pattern likely occurs in veterinary geriatric patients. This would explain why when they recover from anesthesia some vocalize, pace, pant and appear disoriented. POCD would also explain why some dogs are depressed for months following anesthesia. Sometimes these patients need to be sedated or even put on a constant-rate-infusion of sedation until the anesthesia wears off. Getting these patients back to a familiar environment or allowing owners to visit may help.

Senior pets are still just as loving as they were when they were little, and with a little extra kindness and consideration, we can still make them feel right at home.

Amy Newfield is a certified veterinary technician specializing in emergency critical care at BluePearl Pet Hospital in Waltham, Massachusetts.

Reference

1. Maze M, Cibelli M, Grocott HC. Taking the lead in research into postoperative cognitive dysfunction. *Anesthesiology* 2008;108(1):18-30.

Semintra® (telmisartan oral solution) 10 mg/mL

For oral use in cats only
Angiotensin II Receptor Blocker

Brief Summary: Before using SEMINTRA, please consult the product insert, a summary of which follows:

Caution: Federal law restricts this drug to use by or on the order of a licensed veterinarian.

Description: SEMINTRA (telmisartan oral solution) is a clear, colorless to yellowish viscous solution containing 10 mg/mL telmisartan.

Indication and Usage: SEMINTRA is indicated for the control of systemic hypertension in cats. The initial dose of SEMINTRA is 1.5 mg/kg (0.68 mg/lb) orally twice daily for 14 days, followed by 2 mg/kg (0.91 mg/lb) orally once daily. The dose may be reduced by 0.5 mg/kg (0.23 mg/lb) increments to a minimum of 0.5 mg/kg (0.23 mg/lb) orally once daily to manage SEMINTRA-induced hypotension. SEMINTRA can be administered directly into the mouth, or next to or on top of a small amount of food. Do not mix into food.

SEMINTRA should be administered using the dosing syringe provided in the package. The dosing syringe fits onto the bottle and has 0.1 mL incremental marks. The dose should be rounded to the nearest 0.1 mL. After administration close the bottle tightly with the cap. Rinse the dosing syringe with water and let air dry.

If the cat vomits within 30 minutes of dosing, the cat may be re-dosed.

Information for Cat Owners: Adverse reactions can occur with use of SEMINTRA. The most common adverse reactions reported during the field studies included vomiting, diarrhea, lethargy, weight loss, anemia, and dehydration.

Contraindications: Do not use in cats with a hypersensitivity to telmisartan.

Human Warnings: Not for human use. Keep out of reach of children.

SEMINTRA is an angiotensin II antagonist/angiotensin receptor blocker (ARB). Pregnant women should avoid contact with SEMINTRA because substances that act on the renin-angiotensin-aldosterone system (RAAS) such as angiotensin receptor blockers (ARBs) can cause fetal and neonatal morbidity and death during pregnancy in humans.

Precautions: SEMINTRA can cause mild anemia or non-regenerative anemia. Cats should be monitored for anemia when initiating treatment with SEMINTRA.

SEMINTRA may cause inappetence and weight loss in some cats. Cats should be monitored for weight loss when initiating treatment with SEMINTRA. Use with caution in cats with a history of vomiting, inappetence, or weight loss.

SEMINTRA has not been evaluated in cats with systolic blood pressure >200 mmHg.

The safe use of SEMINTRA in cats with hepatic disease has not been evaluated.

SEMINTRA is metabolized by the liver.

The safe use of SEMINTRA has not been evaluated in cats less than 9 months of age, or in cats that are pregnant, lactating, or intended for breeding. **See Human Warnings.**

The safe use with other anti-hypertensive medications has not been evaluated.

Adverse Reactions: The safety of SEMINTRA was evaluated in a 28-day field study in 192 cats. Adverse reactions that occurred include vomiting 46 (24.0%), diarrhea 18 (9.4%), lethargy 13 (6.8%), weight loss 13 (6.8%), decreased appetite/inappetence 13 (6.8%), non-regenerative anemia 11 (5.7%), dehydration 10 (5.2%), retinal lesions (target organ damage) 4 (2.1%).

The long-term safety of SEMINTRA was evaluated in an open-label, 5-month field effectiveness and safety study in 107 cats that received at least one dose of SEMINTRA. Adverse reactions that occurred in this study are weight loss 37 (34.6%), vomiting 32 (29.9%), dehydration 18 (16.8%), non-regenerative anemia 17 (15.8%), anorexia 14 (13.1%), diarrhea 12 (11.2%), lethargy 12 (11.2%), decreased appetite/inappetence 11 (10.3%), heart murmur 10 (9.3%), death, euthanasia, found dead 9 (8.4%), cough 8 (7.5%), and retinal lesions (target organ damage) 6 (5.6%).

Nine cats died or were euthanized during the study. Three cats had progressive chronic kidney disease that may have been affected by telmisartan treatment, concurrent disease, or inadequate control of hypertension. The other six cats died of causes unrelated to treatment (e.g. neoplasia).

To report suspected adverse drug events, for technical assistance, or to obtain a copy of the Safety Data Sheet (SDS), contact Boehringer Ingelheim Vetmedica, Inc. at 1-866-636-2226. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or at <http://www.fda.gov/AnimalVeterinary/SafetyHealth>.

Effectiveness: Effectiveness was demonstrated in a 28-day multi-center, controlled, randomized and masked field study in client-owned cats with hypertension, and in an open-label 5-month field study.

28-Day Field Study

In a 28-day study, 288 cats with hypertension (systolic blood pressure [SBP] 160-200 mmHg) were enrolled in the study and randomized to treatment with SEMINTRA (telmisartan oral solution) (n=192) or vehicle control (n=96). The study population included cats with hypertension associated with chronic kidney disease or controlled hyperthyroidism, or idiopathic hypertension. The per protocol population for effectiveness was 141 SEMINTRA treated cats and 79 control cats. SEMINTRA was administered orally at 1.5 mg/kg twice daily for 14 days, then 2 mg/kg once daily until study end; the vehicle control was administered at a mL/kg volume equivalent to SEMINTRA. The two primary variables for effectiveness were comparison of the SEMINTRA and control group mean SBP (mSBP) from baseline to Day 14, and a decrease in mSBP >20 mmHg in the SEMINTRA group from baseline to Day 28. Cats with SBP >180 mmHg at Days 14 or 28 were rescued and removed from the study. There was a statistically significant difference between the mSBP for the SEMINTRA group compared to the control group at Day 14 (p=0.0005). At Day 14 the SEMINTRA group mSBP decreased by 23.2 mmHg, and the control group mSBP decreased by 7.3 mmHg. At Day 28, the SEMINTRA group mSBP decreased 23.9 mmHg compared to baseline.

5-Month Field Study

One hundred-seventy cats from the SEMINTRA group that had successfully completed the 28-day study were enrolled in a 5-month open-label study. At the beginning of the 5-month study most cats were administered SEMINTRA at 2 mg/kg once daily. Cats that experienced hypotension (defined as SBP <120 mmHg) at 2 mg/kg once daily could have the SEMINTRA dose reduced to 1 mg/kg once daily. Cats that experienced hypotension at 1 mg/kg once daily could have the SEMINTRA dose reduced again to 0.5 mg/kg once daily. Cats were evaluated for SBP, target organ damage (TOD; primarily assessed by retinal photographs), clinical pathology and adverse reactions. SBP was measured on Days 28, 56, 98, 140 and 182 and retinal photographs and clinical pathology were collected on Days 28, 98 and 182. Seventy-three (68.2%) cats completed the study (Day 182), 8 cats were removed for hypertension (SBP >180 mmHg), 2 cats were removed for hypotension, 10 cats were removed by the owner or for owner non-compliance, 8 cats were removed for new or worsening TOD, and 6 cats were removed for adverse reactions unrelated to TOD. Twenty-six cats had dose reductions to 1 mg/kg once daily to manage hypotension. Of these 26 cats, 10 had an additional dose reduction to 0.5 mg/kg once daily.

NADA 141-501, Approved by FDA

Manufactured for:
Boehringer Ingelheim Vetmedica, Inc.
St. Joseph, MO 64506, U.S.A.

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Reference: Package Insert 449201-00 Revised 03/2018

09/2018

How losing a pet helped me **connect** with veterinary clients

My work in a specialty practice where loss was commonplace didn't resonate with me until much later. After losing my own pet, I understand clients' pain much more acutely.

By Leah Parris, RVT, CCFP, HABc



For several years I worked at a veterinary specialist facility. Internists, oncologists, dermatologists, neurologists and more would see cases when a patient's regular veterinarian couldn't perform further diagnostics or surgeries. During my time there, I witnessed a range of emotions displayed by clients, but being that this hospital was a last resort for pets with problems, I saw more sadness than anything else. Unfortunately, death was a common occurrence, and I dealt with it every day.

I was always taught to be strong for clients in these situations. They look to you for kind words and sincere actions, even as slight as a hand on a shoulder. Every day, I watched pets and their owners go through both dilemmas and frequently found myself watching the pet owners' reactions. Tears would run down their faces, tissues would be strewn all over the floor and the worst part was seeing the men cry. Nothing is worse than seeing a man cry over the loss of his best friend.

Over my time there, I noticed something about myself and thought, "What is wrong with me?" I never cried. I never had tears in my eyes or a lump in my throat or even

felt like I needed to cry. I repeatedly told myself that I had to be strong for the owners because if they saw me crying, it could make them more upset. I remember talking to my mother one day after work and telling her how I thought this job was making me coldhearted. It was like I was missing the compassion switch in my head.

Little did I know, I had the switch—it just hadn't been turned on.

After leaving that specialty hospital, I started working at the clinic where I lost my lovely dog Lylah. Every euthanasia appointment I experienced after that made me break down in tears. Losing Lylah had opened my eyes to a whole new world of pet ownership—and it wasn't a world I wanted to know.

I took a few months off from being a veterinary technician. I needed time to regain composure and focus.

My first job back in a vet clinic was nine months after Lylah's death. During my first euthanasia appointment back, I cried. I couldn't hold it in, as much as I tried.

However, it felt different. The pet owner and I had something we both could relate to. We chatted, while crying with each other, about

our dogs and the unforgettable experiences we had. I had found a way of connecting with clients on a personal level, and losing Lylah had helped me get there.

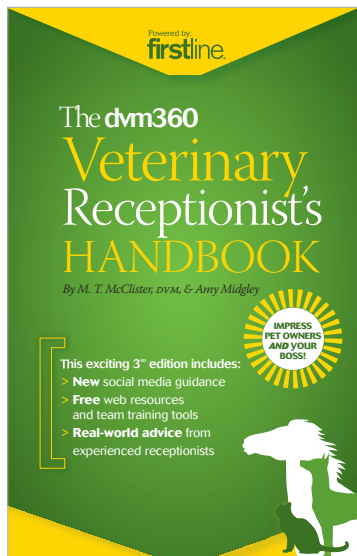
I had never known what it felt like to lose a pet, so I never had the emotions related to it, until I lost my own. I now understood how all the clients that I had interacted with in the past had felt during such a painful moment. After a while of crying so much about it, I learned to be strong again. This time, it wasn't just for the pet owner, but for me as well.

I texted my mom and told her that I love what I do, but some cases make me think of Lylah and wonder if I'm in the wrong profession. My mom bluntly but so perfectly replied, "Nope ... you just have compassion. This is what Lylah would want you to do." Of course, that just made me cry harder but after I calmed myself down, I took to heart what my mom told me.

I won't be able to save every animal, it's inevitable, but I can damn sure try my best. For Lylah.

Leah Parris, RVT, CCFP, HABc, is practice manager at Brookhaven Animal Hospital in Brookhaven, Georgia.

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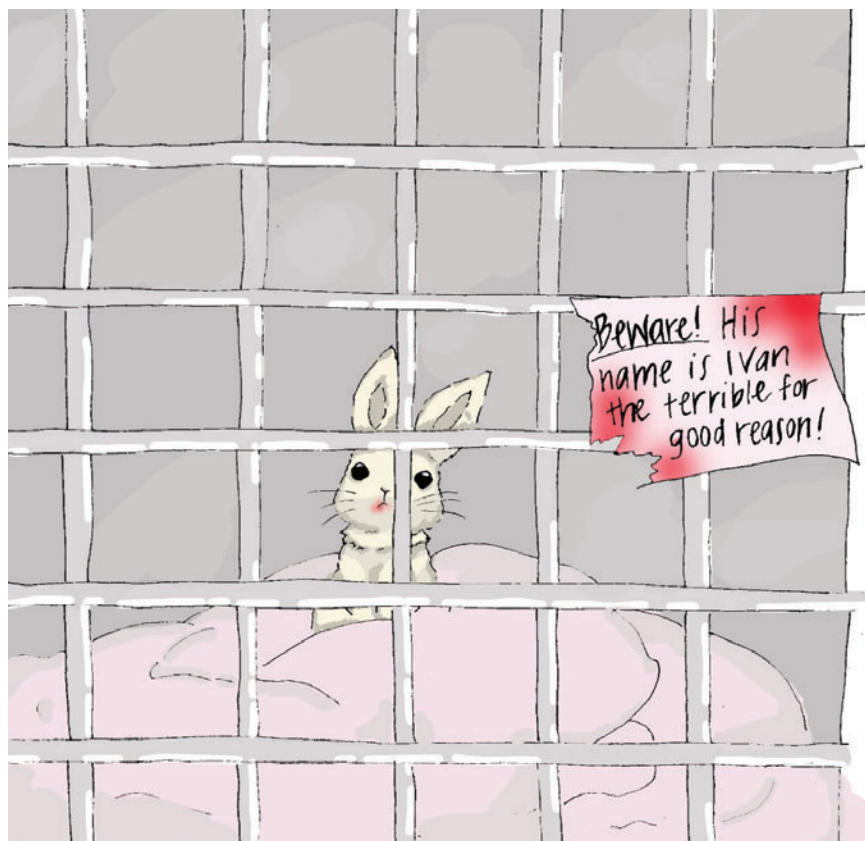
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Veterinary cage-card diaries:

Ivan the Terrible

Some cage cards are straightforward. Some are more clever. Some are just downright hilarious. We turned our favorite into a visual.



We asked our Instagram followers what their favorite cage cards have been during their time as veterinary professionals. Unsurprisingly, there were tons of classics ("Hello, my name is Scooter. I am the spawn of Satan. I will attack you every chance I get!" or our personal favorite, "Feed outside! Food goes in, sh*t comes out—IMMEDIATELY!").

However, the cage card that Instagram user @leftoverwordsoup brought to our attention was one

that really stuck out.

"Beware, his name is Ivan the Terrible for good reason," she said the cage card read. "(Blood splatters [were] all over [the] page and half the page [was] shredded). This was on the cage of the tiniest, cutest-looking rabbit ever."

Using our imagination and some art supplies, we recreated what we think that may have looked like. Behold, the aptly named Ivan the Terrible!



Check out our Instagram for more veterinary hilarity [@dvm360mag!](https://www.instagram.com/dvm360mag)

A photograph of a brown horse running through a field of tall grass. The horse is captured in mid-stride, with its front legs extended forward and its hind legs pushing off. Its mane and tail are flowing in the wind. The background is a soft-focus landscape under a cloudy sky.

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References: 1. Semintra® (telmisartan oral solution) Prescribing Information. Boehringer Ingelheim Vetmedica, Inc. 2018.
2. Zimmering T. Ease of use of Semintra® and its effects on quality of life—update on cat owner feedback ("EASY Programme") [abstract]. In: Proceedings from the 21st Federation of European Companion Animal Veterinary Associations (FECAVA); October 15–17, 2015; Barcelona, Spain. Poster.

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