BE A HERO WITH CLARO®
(florfenicol, terbinafine, mometasone furoate) Otic Solution

Guarantee compliance and make ear infections easier

Treat your patients’ most common otitis externa infections with one dose administered by you.

SAVE THE DAY. USE CLARO® FOR YOUR MOST common OTITIS CASES.

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

PRECAUTIONS: For use in dogs only. Do not use in cats (see POST APPROVAL EXPERIENCE). CLARO® has been associated with rupture of the tympanic membrane. Reevaluate the dog if hearing loss or signs of vestibular dysfunction are observed during treatment. Signs of internal ear disease such as head tilt, vestibular signs, ataxia, nystagmus, facial paralysis, and keratoconjunctivitis sicca have been reported (see POST APPROVAL EXPERIENCE) with the use of CLARO®. Wear eye protection when administering CLARO®. (see Human Warnings, PRECAUTIONS, POST APPROVAL EXPERIENCE).

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CLARO
(flofenicol, terbinafine, mometasone furoate)
Otic Solution for use in dogs only

Do Not Use in Cats.

Antibacterial, antifungal, and anti-inflammatory

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 flofenicol, 14.8 mg/mL terbinafine (equivalent to 16.6 mg/mL terbinafine hydrochloride) and 2.2 mg/mL mometasone furoate. Active ingredients include purified water, propylene carbonate, propylene glycol, ethyl alcohol, and polyethylene glycol.

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

DOSAGE AND ADMINISTRATION:

- CLARO should be administered by veterinary personnel.
- Wear eye protection when administering CLARO. (see Human Warnings, Precautions, Post-Approval Experience).
- Splitter may occur if the dog shakes its head following administration. Persons near the dog during administration should also take steps to avoid ocular exposure.

Shake before use.
Verify the tympanic membrane is intact prior to administration. (see Contraindications, Precautions, Post-Approval Experience).
- Administer one dose (1 dropperette) per affected ear.
  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. Restrict the dog to minimize post application head shaking to reduce potential for splatter of product and accidental exposure in people and dogs (see Post-Approval Experience).
  11. Repeat with other ear as prescribed.

CONTRAINDICATIONS:
Do not use in dogs with known tympanic membrane perforation (see Precautions).

CLARO is contraindicated in dogs with known or suspected hyper-sensitivity to flofenicol, terbinafine hydrochloride, or mometasone furoate.

WARNINGS:

- Human Warnings: CLARO may cause eye injury and irritation (see Precautions, Post-Approval Experience).
- If contact with eyes occurs, flush copiously with water for at least 15 minutes. If irritation persists, consult a physician.
- Humans with known hypersensitivity to any of the active ingredients in CLARO should not handle this product.
- Not for use in humans. Keep this and all drugs out of the reach of children. Avoid skin contact. In case of accidental ingestion by humans, contact a physician immediately.

PRECAUTIONS:

For use in dogs only. Do not use in cats (see Post-Approval Experience).

Wear eye protection when administering CLARO and restrain the dog to minimize post application head shaking. Reducing the potential for splatter of product will help prevent accidental eye exposure in people and dogs and help to prevent ocular injury (see Dosage and Administration, Human Warnings, Post-Approval Experience).

Prefer patient selection is important when considering the benefits and risks of using CLARO. The integrity of the tympanic membrane should be confirmed before administering the product.

CLARO has been associated with rupture of the tympanic membrane. Reevaluate the dog if hearing loss or signs of vestibular dysfunction are observed during treatment. Signs of internal ear disease such as head tilt, vestibular signs, ataxia, nystagmus, facial paralysis, and keratoconjunctivitis sicca have been reported (see Post-Approval Experience) with the use of CLARO. Do not administer orally.

Use of topical 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.

POST-APPROVAL EXPERIENCE (2019):
The following adverse events are based on post-approval adverse drug experience reporting for CLARO. Not all adverse events are reported to FDA/CVM. It is not always possible to reliably estimate the adverse event frequency or establish a causal relationship to product exposure using these data.

In humans, accidental exposure leading to corneal ulcers and other ocular injuries such as eye irritation and redness have been reported. Exposure occurred when the dog shook its head after application of CLARO. Skin irritation has also been reported.

In dogs, the adverse events reported are presented below in decreasing order of reporting frequency:
- Ear discharge, head shaking, ataxia, internal ear disorder (head tilt and vestibular), deafness, emesis, nystagmus, pain (head and body), vomiting, urination, and diarrhea.
- Ear discharge, head shaking, ataxia, internal ear disorder (head tilt and vestibular), Craniocerebral Hemorrhage, and Henner’s syndrome (third eyelid prolapse and miosis).
- Nystagmus, lethargy, anemia, corneal ulcer, cranial nerve disorder (facial paralysis), tympanic membrane rupture.

CLARO is not approved for use in cats. The adverse events reported following extra-label use in cats are presented below in decreasing order of reporting frequency:
- Ataxia, anemia, internal ear disorder (head tilt and vestibular), Henner’s syndrome (third eyelid prolapse and miosis).
- Nystagmus, anemia, corneal ulcer, mydriasis, rheumatoid arthritis, and deafness.

To report suspected adverse drug events and/or obtain a copy of the Safety Data Sheet (SDS) or for technical assistance, contact Elanco at 1-800-423-9874. For additional information about reporting adverse drug experiences for animal drugs, contact FDA at 1-888-FDA-VETS or http://www.fda.gov/reportanimalmeds.

Information for Dog Owners:

- Owners should be aware that adverse reactions may occur following administration of CLARO and should be instructed to observe the dog for signs such as ear pain and irritation, vomiting, head shaking, head tilt, incoordination, eye pain and ocular discharge (see Post-Approval Experience). Owners should be advised to contact their veterinarian if any of the above signs are observed.

- Owners should also be informed that splatter may occur if the dog shakes its head following administration of CLARO which may lead to ocular exposure. Eye injuries, including corneal ulcers, have been reported in humans and dogs associated with head shaking and splatter following administration. Owners should be careful to avoid ocular exposure (see Precautions, Post-Approval Experience).

PHARMACOLOGY:
CLARO Otic Solution is a fixed combination of three active substances: flofenicol (antibacterial), terbinafine (antifungal), and mometasone furoate (steroideal anti-inflammatory). Flofenicol is a bacteriostatic antibiotic which acts by inhibiting protein synthesis. Terbinafine is an antifungal which selectively inhibits the early synthesis of ergosterol. 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 clinical 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 flofenicol and terbinafine 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 Staphylococcus 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 (as the affected ear). 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, edema, oozing, and ulceration. Success was based on clinical improvement at Day 20. 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/group) at 0X, 1X, 3X, and 10X the recommended dose once every 2 weeks for a total dosing period of 28 days (3 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 wellness and clear aural 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 hepaticcellular enlargement/cytoplasmic 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
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Shawnee, KS 66216
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Approved by FDA under NADA # 141-440
June, 2021
LV106
9C2090020
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We’ve got the proof on pain.

While others talk about pain management, our pain portfolio is proven in more than 20 favorable studies. When you prescribe METACAM® (meloxicam) or PREVICOX® (firocoxib) for your post-operative (PREVICOX only) and canine osteoarthritis patients, the research stands with you, so that you can get your patients back to living the life they love.

IMPORTANT SAFETY INFORMATION: METACAM (meloxicam oral suspension) and PREVICOX (firocoxib) Chewable Tablets are for use in dogs only. METACAM (meloxicam) Solution for Injection is approved for use in dogs or cats (not indicated for osteoarthritis in cats). Repeated use of meloxicam in cats has been associated with acute renal failure and death. Do not administer additional injectable or oral meloxicam to cats. As a class, cyclooxygenase inhibitory NSAIDs like METACAM and PREVICOX may be associated with gastrointestinal, kidney, or liver side effects. Dogs should be evaluated for pre-existing conditions and currently prescribed medications prior to treatment with METACAM or PREVICOX, then monitored regularly while on therapy. Concurrent use with another NSAID, corticosteroid, or nephrotoxic medication should be avoided or monitored closely. Please refer to the package insert or product website for complete product information.
CALENDAR

VHMA 2022 Annual Meeting and Conference
September 8-10
Orlando, Florida
www.vhma.org/conference/annual-meeting-2022

Metacam® (meloxicam)

Description: Metacam is a non-steroidal anti-inflammatory drug (NSAID) of the oxicam class. It is available as a solution for oral administration in cats. Metacam contains meloxicam, a 5-(2-phenyl-1H-benzo[d]imidazol-5-yl)pentan-2(1H)-one as the active moiety. The chemical name for Metacam is 1-[[4-[(4-methylphenyl)ethoxy]phenyl]methyl]-5-phenyl-1H-pyrazole-3-carboxylic acid. 1, 3-diol.

Formulation: Metacam Oral Suspension is indicated for the control of pain and inflammation associated with musculoskeletal disorders in cats.

Contraindications: Drugs with known hypersensitivity to meloxicam should not be used in cats with a history of gastrointestinal ulcers, renal, or hepatic dysfunction.


Precautions: The use of Metacam Oral Suspension in dogs younger than 6 months of age, dogs younger than 6 months of age weighing less than 8 kg, pregnant or lactating bitches, or dogs with bleeding disorders has not been established in dogs with those disorders.

Adverse Reactions: The following adverse reactions are based on post-marketing adverse drug event reporting. Not all adverse reactions are reported to FDA/CVM. It is not always possible to reliably estimate the adverse event frequency or establish a causal relationship to product exposure using these data. The adverse reactions are reported to FDA/CVM. It is not always possible to reliably estimate the adverse event frequency or establish a causal relationship to product exposure using these data.

A list of all adverse reactions is available at www.fda.gov/animaldrugs. The following adverse reactions are based on post-approval adverse drug event reporting. The adverse reactions are reported to FDA/CVM. It is not always possible to reliably estimate the adverse event frequency or establish a causal relationship to product exposure using these data.

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Siliphos® Silybin Phytosome
(Milk thistle Silybum marianum seed extract/phosphatidylcholine complex) .... 100 mg
Bilear® (Artichoke Cynara cardunculus leaf extract) 100 mg
N,N-Dimethylglycine HCl (DMG) ....................... 100 mg
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**From the cover**

38 **Making a difference in the veterinary profession**

dvm360®’s Veterinary Heroes™ recognition program honors 12 individuals who have had a positive effect on the industry
Rapidly activate your patient’s unique gut microbiome for ultimate digestive health with breakthrough ActivBiome+ Technology.
It has truly been 1 thing after another throughout the past several years. In spring 2020, the COVID-19 pandemic created enormous challenges for the veterinary industry, and since then, things have not returned to prepandemic business as usual for many practices.

As practices have adapted to evolving circumstances, many of them have endured major workforce changes, with veterinarians, technicians, and other staff moving on and new hires often difficult to obtain. The pandemic also began a cascade of supply chain challenges that continue to affect the industry today. Adding to all this are the economic effects of Russia’s invasion of Ukraine and the related increase in energy costs, which is driving inflation across the globe. Although the veterinary industry has been weathering its unprecedented challenges, it is in times like these that every decision takes on a greater importance, including your recommendations to clients and peers.

This month, dvm360® is launching a new publication—our first Top Recommended Veterinary Products guide. When it comes to choosing products for your patients, this guide will assist practices and pet owners by providing the results of our recent survey of veterinary professionals at your fingertips.

In this inaugural survey, top products were selected by your peers in categories that include pet food, parasite prevention, toys, and dermatology.

Additionally this month, the winners of the 2022 Hospital Design Competition are announced in our annual hospital design supplement. They include grand prize winners Veterinary Emergency & Referral Center by Ethos Veterinary Health (Honolulu, Hawaii) and Cole Veterinary Hospital at Harmony (Spring, Texas). Merit award winners are Animal Care Center of Downers Grove (Downers Grove, Illinois), Animal Emergency & Referral Associates (West Caldwell, New Jersey), Cypress Fairhaven Animal Hospital (Cypress, Texas), Veterinary Clinic of Myrtle Beach (Myrtle Beach, South Carolina), and South Creek Animal Clinic (Spring, Texas).

dvm360® strives to be a resource to help you find new options for your practice and to provide you with information that helps you identify the best information for meeting the unique needs of your specific practice. If there is anything we can do to be a more valuable resource to you and your practice, please let us know.

—Mike Hennessy Jr
President & CEO
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A hero lies in you

I looked up “what makes a human a hero” online, and here’s the definition I found: “A hero is selfless, a genuinely good person, and someone who gets the undivided attention of all of us and causes change. Someone willing to risk their own life to save another.” It got me thinking...that is every single one of us in this incredible profession. In some way, shape, or form, we provide consistent selfless care and even have risked our own lives at times, with some of the aggressive patients we have come across.

Think about a hero you encounter in your day-to-day work life. They are all around us. I remember seeing one of my technicians place an 18-ga cephalic catheter in a 17-year-old dehydrated cat with chronic kidney disease, provide me with 3 treatment plans for my hospitalized patients, call my postoperative surgical patients from the day before, and stabilize an animal that was hit by a car—all in under an hour. I was shocked, speechless, and proud to call her our hero.

As we celebrate and congratulate our incredible second inaugural class of dvm360®’s Veterinary Heroes™, I consistently find 5 key characteristics in literature that make up a leading hero.

1. COURAGE
I’ve always said veterinary professionals are heroes without capes. We are courageous, audacious, and bold. It’s difficult to achieve anything truly heroic unless you’re up against daunting odds. Look what we have just went through with COVID-19 quarantine, as well as what we are continuing to overcome with the pandemic. It takes courage for us to have difficult conversations with our clients and to know when it’s time to help our patients cross over with dignity and respect.

As Nelson Mandela put it, “Courage is not the absence of fear but the triumph over it.” How many of us had to face a difficult situation, regardless of the fear we may have felt? I used to feel that when I heard there was an intact feral cat on the other side of my exam room door! Our Veterinary Hero for feline medicine, Jennifer Conrad, DVM, has incredible courage to lobby for the ethical treatment of all feline species in the United States.

2. HUMILITY
Something our veterinary profession is full of: humility. We rarely give ourselves the credit we deserve for saving an animal’s life or helping a family grieve the loss of their pet’s life. Nothing makes a heroic leader seem a little less heroic than if they seem to want constant credit for their actions. True heroism can amaze us, but it also oftentimes contains a component of modesty. I’ve always told veterinary students to stay humble and embrace humility. When speaking to one of the recipients of this year’s Veterinary Heroes awards, she said, “It’s what our team does every day to thrive and survive in this
world.” We rarely bask in the glory of our accomplishments, but it is nice to soak in the gratitude when it’s heading our way. When telling Teresa Crocker, DVM, she was the Veterinary Heroes™ award recipient for equine medicine, she stated, “It’s what I signed up for.” The humility was incredible.

3. SELFLESSNESS
True leaders always put others first. How often do we check in on each other to see how we are doing? I’m glad to hear we are doing it more now than before the COVID-19 pandemic hit. Ironically, selflessness can frequently be strategic, because focusing on other’s needs often winds up helping you achieve your own goals. However, a heroic leader does so without any expectation of payback. I even classify effective mentorship as a strong trait of selflessness and ultimate heroism. Our Veterinary Hero in emergency medicine this year, Elizabeth Rozanski, DVM, has used her own money to help her team and fellow colleagues obtain any necessary Continuing Education courses to enhance their skill set as a veterinary professional.

4. PATIENCE
Although heroism often requires quick thinking and decisiveness, truly heroic leaders often also display an impressive amount of patience. There’s that saying, “have patience with your patients,” which is so true in our profession. As simply as we want to trim dog’s nails, this somewhat easy task can become an extremely fearful one, where we, as professionals, must provide a space for our patients to experience less fear, anxiety, and stress.

Even effective mentorship requires patience. How long did it take for you to do your first dog spay? We all must start somewhere. Providing patience and time to our mentees ensures a better tomorrow for our profession and team. Our Veterinary Hero for internal medicine this year, Tammy Anderson, DVM, provides time and education to her general practitioner referrals so they can learn and ask as many questions as possible regarding their referred patient. This provides a collaborative approach to the care of the referral patient.

5. CARING
Separate from selflessness, heroic leaders display a sense of concern and kindness for others, including our patients. This can often manifest itself in strong but gentle actions intended to improve the lives of others. These are small acts of heroism that rarely attract any notice. It goes without saying how caring veterinary professionals are both in and out of the exam room.

This year’s Veterinary Hero award recipient for client service representative, Mary Beth LaBee, truly embodies the act of caring. She gives herself completely to her clients; she cries with them, laughs with them, and knows the strength of the human-animal bond. Our profession can wear on compassion and caring, but LaBee’s unconditional support and admirable outlook restores anyone with whom she comes into contact.

I invite you all to continue to be a hero to each other and to your patients. We need more heroes now than ever in our lives. Thank you for continuing to advocate for our profession and the animals we serve.

Please join me in congratulating our 2022 Veterinary Heroes™. Who will you nominate next year? Remember, a hero lies in you. 

Adam Chiasson, DVM, MBA

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**INDICATIONS** Adequan® Canine is recommended for intramuscular injection for the control of signs associated with non-infectious degenerative and/or traumatic arthritis of canine synovial joints. **IMPORTANT SAFETY INFORMATION** Adequan® Canine should not be used in dogs who are hypersensitive to PSGAG or who have a known or suspected bleeding disorder. It should be used with caution in dogs with renal or hepatic impairment. Adverse reactions in clinical studies (transient pain at injection site, transient diarrhea, and abnormal bleeding) were mild and self-limiting. In post approval experience, death has been reported in some cases; vomiting, anorexia, depression/lethargy and diarrhea have also been reported. The safe use of PSGAG in breeding, pregnant or lactating dogs has not been evaluated. **Caution:** Federal law restricts this drug to use by or on the order of a licensed veterinarian. For additional safety information, please see Full Prescribing Information at adequancanine.com.

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1. Adequan® Canine Package Insert, Rev 1/19
Euthanasia is a procedure that most veterinarians perform frequently. It is chosen for many reasons, most commonly to relieve pain and suffering when further treatment is no longer in the patient’s best interest. Euthanasia is conventionally defined as the ending of a life that minimizes or eliminates pain and distress. Veterinary professionals, relying on their expertise and experience, aim to perform euthanasia in ways that align with the best interest of all involved.

Studies on euthanasia have helped validate some of the things we have learned and most owners want to be allowed to witness the death of their pet,¹⁻³ they want reassurance they are making the right choice,⁴⁻⁶ and they look toward their veterinary teams to provide guidance on deciding the right time.⁷ Euthanasia is an important procedure, critical not only for animal welfare⁸ but also for the emotional well-being of the owner and owner-veterinarian relationship.⁹

Yet, aside from some overarching generalizations, we know little about how pet owners define a “good” euthanasia vs a bad one (dysthanasia). What’s being provided in practice today? How does this compare with veterinary professionals’ definition? What’s being provided in practice today?

To help answer this question—how pet owners define a good death—the Companion Animal Euthanasia Training Academy (CAETA) distributed an anonymous online survey to pet owners between December 2021 and January 2022. We want to share with you what we learned.

New study reveals some surprising facts

HOW PET OWNERS DEFINE A GOOD DEATH

We analyzed responses from 1578 primarily White, college-educated, women pet owners. When asked to rate the euthanasia that impacted them the most, most owners reported positive experiences. In fact, on a scale from 1 (worst experience) to 10 (best experience), 14% reported scores between 1 and 2, 14% reported between 3 and 4, 27% reported scores between 5 and 7, and 32% reported scores between 8 and 10. To better understand what predicted a good experience, this number increased to 64% when the time between sedation and euthanasia injection was more than 20 minutes. This suggests that even when things take longer between sedation and euthanasia injection than planned, this is not necessarily viewed negatively by owners. Instead, we found that the most important aspects of sedation to owners in determining a positive experience if the euthanasia was performed at home (80%) than if performed at a veterinary hospital (43%). We asked what elements of an at-home euthanasia are most important in determining a good experience and found that the things deemed as most important include a veterinarian who comes prepared with all the materials needed, is friendly and provides a relaxed atmosphere, is willing to gather where the pet wants to be (eg, on the bed), and provides private time before and after the euthanasia.

Location

We began by asking about the location of the procedure. We found that owners were more likely to report having a positive experience if the euthanasia was performed at home (80%) than if performed at a veterinary hospital (43%). We asked what elements of an at-home euthanasia are most important in determining a good experience and found that the things deemed as most important include a veterinarian who comes prepared with all the materials needed, is friendly and provides a relaxed atmosphere, is willing to gather where the pet wants to be (eg, on the bed), and provides private time before and after the euthanasia.

Owners were also more likely to report a positive experience if they had at least 1 day to prepare (66%) vs if it was an emergency (33%). The more time owners had to prepare, the more likely they were to report a positive experience. Relatedly, those who had a preeuthanasia appointment were more likely to report experiencing a good death than those who did not (69% vs 59%, respectively). When asked about elements of the preeuthanasia appointment, the most important element identified by owners was that they felt the euthanasia procedure was explained in a way they understood.

So it would appear that preplanning, and particularly a preeuthanasia appointment, is helpful in creating a positive experience.

Use of sedatives

What else is important within the euthanasia event? The next series of questions explored the use of sedatives prior to euthanasia. We found that owners were more likely to be satisfied when their pet was given a sedative prior to euthanasia (62%) vs when not given a sedative (31%). When asked about the effect of the sedative, owners reported the highest positive experience when their pet was fully asleep (66%) vs relaxed and partially asleep (62%) or relaxed and fully awake (51%). When asked about the amount of time between the sedative and euthanasia injection, we found that longer was better. Although 52% of those with less than a minute between the time of sedation and euthanasia injection reported a positive experience, this number increased to 64% when the time between sedation and euthanasia injection was more than 3 minutes. Ratings stayed high (64%) when the time between sedation and euthanasia injection was more than 20 minutes. This suggests that even when things take longer between sedation and the euthanasia injection than planned, this is not necessarily viewed negatively by owners. Instead, we found that the most important aspects of sedation to owners in determining a positive experience.
a good death include being able to be with their pet when they are given the sedative, that the sedative does not medically complicate the rest of the procedure, that the veterinary team does not need to restrain the pet, and that the impact of the sedative is explained before it is given. The sedative adverse effects most troubling to owners include any seizure-like activity and the appearance of causing the pet pain.

The procedure

We next shifted to the euthanasia procedure itself. We found the elements reported by owners as having the largest potential negative impact on the euthanasia experience include not having an opportunity to be physically close (hug, stroked) to your pet during their last minutes; the pet appearing to be in pain in their final moments; the pet thrashing, making sudden movements, or vocalizing when the euthanasia solution is injected; and the pet appearing scared or stressed (Figure 1). The adverse effects of euthanasia found most troubling to owners include seizures and vocalization.

Additional factors of the euthanasia procedure that were identified as important to avoid include not allowing owners to be with the pet during the entire procedure; hearing the pet in what sounded like distress when out of sight or appearing to be in distress when they are returned to the room; and not being allowed to spend time with the pet beforehand. Of note is that factors such as the death not going as fast as they expected or the veterinary team having to deviate from the plan but explaining the need for the change were not significant negative impactors.

Overall process

Because we know that many factors beyond the euthanasia procedure are involved with owners’ perception of a good death, we asked a series of questions related to the overall process. For example, we found that feeling their pet’s body was not handled with respect after death or not being offered adequate time or privacy with their pet after their death negatively impacted their perceptions of the experience (Figure 2). Additionally, views about their veterinary team had the potential...
to make a positive or negative impact (Figure 3). Owners who felt the veterinary team was uncaring, inconvenienced, rushed, distracted, or not open to their questions were more likely to view the experience negatively.

According to CAETA, which started to more deeply define companion animal euthanasia and dysthanasia in 2017, companion animal euthanasia is the proper use of technique in line with professional and societal welfare expectations, wherein the animal feels minimal to no anxiety, pain, or fear and observers feel safe and supported. Dysthanasia can be defined as a bad death, the opposite of euthanasia.10 This current study reveals owners would define dysthanasia further to include the inability to be present (their pet is fearful without them), lack of preeuthanasia sedation, and any pain or distress observed during the entirety of the appointment, not just the euthanasia method itself.

Companion animal euthanasia should consider the expectations of those who love and care for the pet, including the following:

- Professional, caring staff: The team is willing to accommodate owner/pet preferences, well prepared, and working with a relaxed pace.
- Preappointment education: This option is offered to arrange for important logistics, plus a description of what’s going to happen.
- Preeuthanasia sedation: The pet is in deep sleep, no matter how long it takes.
- To remain with the pet without separation: Owners want the ability to be there for the entirety of the procedure, including all technical aspects.
- No pain or signs of distress before or during the death event: The pet passes quietly and calmly.
- Privacy offered before and after death: Time is afforded to say goodbye, without rushing.
- Respectful body handling: The deceased pet is treated with reverence.

— Honorable mention: at-home euthanasia and the comfort it provides. This was not included in the definition of a good death because it’s a component that may not be achievable in many parts of the world.

**WHAT WE LEARNED**

This tells us that owners view the euthanasia experience from a gestalt (when the whole is perceived as more than the sum of its parts) perspective. From the preeuthanasia appointment to afterdeath body care, each element is important to owners and impacts their perception of a good death.

This means that focusing entirely on the medical aspects of the euthanasia procedure creates multiple opportunities to fall short in the eyes of pet owners. Only through careful attention to each element of the process can we best meet their needs and, concurrently, the needs of our patients.

The positive news from this study is that most pet owners report feeling extremely satisfied with their euthanasia experience. This speaks to the careful attention most veterinary teams give to each element within the process. Also encouraging is that the factors deemed most important by owners are manageable—most only need minor protocol tweaks and increased attention to detail.

As a profession, we are in the gifted position to offer reassurance that they are making the right choice, and they look toward their veterinary teams to provide guidance on deciding the right time.

**REFERENCES**


Studies on euthanasia have helped validate some of the things we have learned: Most owners want to be allowed to witness the death of their pet, they want reassurance that they are making the right choice, and they look toward their veterinary teams to provide guidance on deciding the right time.
Guarantee compliance and make ear infections easier

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CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian. PRECAUTIONS: For use in dogs only. Do not use in cats (see POST APPROVAL EXPERIENCE). CLARO® has been associated with rupture of the tympanic membrane. Reevaluate the dog if hearing loss or signs of vestibular dysfunction are observed during treatment. Signs of internal ear disease such as head tilt, vestibular signs, ataxia, nystagmus, facial paralysis, and keratoconjunctivitis sicca have been reported (see POST APPROVAL EXPERIENCE) with the use of CLARO®. Wear eye protection when administering CLARO®. (see Human Warnings, PRECAUTIONS, POST APPROVAL EXPERIENCE).

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GLARO®
(florfenicol, terbinafine, mometasone furoate) Otic Solution for use in dogs only
Do Not Use in Cats.
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: GLARO® contains 16.6 mg/mL florfenicol, 14.8 mg/mL terbinafine (equivalent to 16.6 mg/mL terbinafine hydrochloride) and 2.2 mg/mL mometasone furoate. Inactive ingredients include purified water, propylene carbonate, propylene glycol, ethyl alcohol, and polyethylene glycol.

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

DOSAGE AND ADMINISTRATION: GLARO® should be administered by veterinary personnel. Wear eye protection when administering GLARO® (see Human Warnings, PRECAUTIONS, POST APPROVAL EXPERIENCE).

Shake before use.
Verify the tympanic membrane is intact prior to administration. (see CONTRAINDICATIONS, PRECAUTIONS, POST APPROVAL EXPERIENCE)

Administer one dose (1 dropperette) per affected ear.
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 seal the oral and then remove cap from the dropperette.
7. Squeeze the application nozzle onto the dropperette.
8. Insert the tipped tip of the dropperette into the affected external ear canal and squint or roll the entire contents (1 mL) into the affected ear.
9. Gently massage the base of the ear to allow distribution of the solution. Restrain the dog to minimize post application head shaking to reduce potential for splatter of product and accidental eye exposure to people and dogs (see POST APPROVAL EXPERIENCE).
10. Repeat with other ear as prescribed.
11. The duration of the effect should last 30 days. Cleaning the ear before 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 hyperactivity to florfenicol, terbinafine hydrochloride, or mometasone furoate).

WARNINGS: Human Warnings: CLARO® may cause eye irritation and irritation (see PRECAUTIONS, POST APPROVAL EXPERIENCE). If contact with eyes occurs, flush copiously with water for at least 15 minutes. If irritation persists, contact a physician. Human with known hypersensitivity to any of the active ingredients in CLARO® should not handle this product.

PRECAUTIONS: For use in dogs only. Do not use in cats (see POST APPROVAL EXPERIENCE). Wear eye protection when administering GLARO® and restrain the dog to minimize post application head shaking. Reducing the potential for splatter of product will help prevent accidental ear exposure in people and dogs, and help prevent ocular irritation (see DOSAGE AND ADMINISTRATION, Human Warnings, POST APPROVAL EXPERIENCE).

Proper patient selection is important when considering the benefits and risks of using CLARO®. The integrity of the tympanic membrane should be confirmed before administering the product. CLARO® has been associated with rupture of the tympanic membrane. Rovakova et al. The dog showing signs of vestibular dysfunction are observed during treatment. Signs of external ear disease such as head tilt, vestibular signs, ataxia, nystagmus, facial paralysis, and keratoconjunctivitis sicca have been reported (see POST APPROVAL EXPERIENCE) with the use of CLARO®

Do not administer orally.
Use of oral 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 PRECAUTIONS, POST APPROVAL EXPERIENCE).

Use of topical otic corticosteroids has been associated with adrenocortical suppression and iatrogenic hyperadrenocorticism in dogs associated with susceptible strains of yeast (Malassezia pachydermatis) and bacteria (Staphylococcus pseudintermedius).

WARNINGS: Human Warnings: CLARO® may cause eye irritation and irritation (see PRECAUTIONS, POST APPROVAL EXPERIENCE). If contact with eyes occurs, flush copiously with water for at least 15 minutes. If irritation persists, contact a physician. Human with known hypersensitivity to any of the active ingredients in CLARO® should not handle this product.

PRECAUTIONS: For use in dogs only. Do not use in cats (see POST APPROVAL EXPERIENCE). Wear eye protection when administering GLARO® and restrain the dog to minimize post application head shaking. Reducing the potential for splatter of product will help prevent accidental ear exposure in people and dogs, and help prevent ocular irritation (see DOSAGE AND ADMINISTRATION, Human Warnings, POST APPROVAL EXPERIENCE).

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PRECAUTIONS: For use in dogs only. Do not use in cats (see POST APPROVAL EXPERIENCE). Wear eye protection when administering GLARO® and restrain the dog to minimize post application head shaking. Reducing the potential for splatter of product will help prevent accidental ear exposure in people and dogs, and help prevent ocular irritation (see DOSAGE AND ADMINISTRATION, Human Warnings, POST APPROVAL EXPERIENCE).

Attempts in dogs administered CLARO® POST Approval Experience. (2019). The following adverse events are based on post approval adverse drug experience reporting for CLARO®. Not all adverse events are reported to FDA/VRM. It is not always possible to reliably estimate the adverse event frequency or establish a causal relationship to product exposure using these data.

In humans, accidental exposure leading to corneal ulcers and other ocular injuries such as eye irritation and redness have been reported. Exposure occurred when the dog shook its head after application of CLARO®. Skin irritation has also been reported. In dogs, the adverse events observed are presented below in decreasing order of reporting frequency: Ear discharge, head shaking, ataxia, internal ear disorder (head tilt and vestibular), deafness, emesis, nystagmus, pinna disorder and ear pain, intracranial-cerebral stasis, vocalization, corneal ulcer, corneal nerve disorder (facial paralysis), tympanic membrane rupture.

CLARO® should be used with caution in cats. The adverse events reported following use in cats are presented below in decreasing order of reporting frequency: Ataxia, anesthesia, corneal ulcer disorder (head tilt and vestibular), Hemovet's syndrome (third eyelid prolapse and retraction), nystagmus, enophthalmos, head tilt, ocular discharge, eye pain, and corneal ulcer.

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

For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-IRATA or online at https://www.fda.gov/regulatoryinformation.

Information for Dog Owners: Owners should be aware that adverse reactions may occur following administration of GLARO® and should be instructed to observe the dog for signs such as ear pain and irritation, vomiting, hemovet’s syndrome, head tilt, incoordination, eye pain, and corneal ulcer (see POST APPROVAL EXPERIENCE). Owners should be advised to contact their veterinarian if any of the above signs are observed. Owners should also be informed that splatter may occur if the dog shakes its head following administration of CLARO® which may lead to ocular exposure. Eye injuries, including corneal ulcers, have been reported in humans and dogs associated with head shaking and splatter following administration. Owners should be careful to avoid ocular exposure (see PRECAUTIONS, POST APPROVAL EXPERIENCE).

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Approved by FDA under NADA # 141-440
A bill put forward by the Arizona Humane Society (AHS) and Humane Society of Southern Arizona (HSSA) was signed into law as part of Arizona’s state budget for 2023. Sponsored by state Senator T.J. Shope, a Republican, SB1271 will address the veterinary shortage in the state by providing incentives to keep veterinarians working within the state.

“The passing of SB1271 in the budget is a significant win for animals in Arizona, as it is a step toward attracting and retaining talent that will provide vital animal health services, making Arizona a better place for animals and people,” Steven Hansen, DVM, MBA, DABVT, DACAW, president and CEO of the AHS, said in the release.

This new bill will create a new Arizona Veterinary Loan Assistance Program, which will provide student loan reimbursement of up to $100,000 to veterinarians who graduated from school after January 1, 2023. To qualify for the reimbursement, veterinarians must work in Arizona for at least 4 years, and it will be required that 2 of those years are spent at a municipal, county, nonprofit shelter, or in an agricultural practice that the United States Department of Agriculture designated as having a shortage.

“Thanks to this budget appropriation, at least 58 new veterinarians will come to work in Arizona by the end of 2023, and each 1 of them will spend at least 2 years working at a public shelter or in an agricultural practice in a rural area over the next 4 years. Moving forward, making this appropriation annual will save countless lives while growing our economy—a win-win solution to an intractable problem,” Steve Farley, CEO of the HSSA, said in the release. “This is a victory for animal lovers across the state and is a great example of the benefits that accrue to our residents when our leaders work together for the common good.”

REFERENCE


National Veterinary Associates (NVA) has announced it has closed the transaction reported previously with Ethos Veterinary Health (Ethos). The NVA is a global pet care organization and community of veterinary hospitals and pet resorts, and Ethos is an innovative veterinary organization focused on emergency and specialty medicine.

Ethos will work in tandem with NVA Compassion-First, NVA’s dedicated specialty and emergency care group, to achieve their aligned mission of medical innovation and using compassionate care to enhance the lives of veterinarians, patients, and their families, according to an association release.

“We are thrilled to welcome Ethos to NVA as we advance our mission to build the premier veterinary community rooted in collaboration, innovation, and advanced medicine,” Greg Hartmann, CEO of NVA, said in the release. “Ethos’ passion and commitment to transforming medicine through the clinical research of Ethos Discovery and the VetBloom education programs will create exciting opportunities for our veterinary teams and enhance our ability to deliver world-class care for pets and their families. I am excited to see the benefits this partnership will bring to patients and the broader veterinary community for many years to come.”

Ethos was initiated in 2015 following the merger of 4 specialty veterinary groups and since has become a key player through a united vision of reimagining veterinary medicine. Along with the high-quality care it offers to pets and clients, Ethos also prioritizes medical innovation and continuing education through initiatives such as Ethos Discovery and VetBloom.

“By partnering with NVA’s innovative, compassionate, and talented team and combining our knowledge and resources, we will be better able to meet the evolving needs of our clients, partners, and local communities,” said G. Ames Prentiss, CEO of Ethos. “NVA’s shared commitment to medical innovation, collaborative operating approach, and desire to advance the veterinary profession creates a strong foundation to support Ethos’ next chapter.”

REFERENCE

Groups propose new veterinary medicine specialty

The American Veterinary Medical Association (AVMA) announced that the American Association of Fish Veterinarians (AAFV), with support from the World Aquatic Veterinary Medical Association, began the process of developing a petition to have fish practice recognized as a veterinary specialty by the American Board of Veterinary Practitioners.

“The specialty is going to allow clients to identify veterinarians who have the knowledge and expertise that prepares them to provide high-quality veterinary care,” Johnny Shelley, immediate past president of the AAFV, said in the AVMA announcement.

With this new specialty can come better care for fish and the veterinarians who take care of them. Board certification will help aquaculture producers find a veterinarian that can provide the level of care fish need, and government agencies can confidently hire veterinarians who have a better understanding of fish health–related issues.

Shelley also disclosed that several veterinary schools are beginning to realize the importance of fish care, and more continuing education opportunities are rising within this realm. Additionally, there has recently been an increase in externship opportunities and academic positions within fish medicine.

The organization will be accepting comments on the proposal through September 2, 2022, according to the AVMA. Anyone interested can email their comments to ABVS@avma.org.

REFERENCE


New sedative, analgesic for dogs authorized

A new veterinary drug for sedation and pain relief in dogs is now available. The drug, an alpha-2 agonist medetomidine and vatinoxan combination (Zenalpha; Vetcare Oy and Dechra Veterinary Products), is indicated for use as a sedative and analgesic in dogs to facilitate clinical examinations, clinical procedures, and minor surgical procedures, according to an announcement by Dechra.

The combination sedative holds the marketing authorization in the United States. The drug received FDA approval in April 2022 and was the first approval marked by the FDA for vatinoxan. The combination of the alpha-2 agonist medetomidine and vatinoxan provides a unique balance of central and peripheral activity that minimizes cardiovascular adverse effects while maintaining the sedative and analgesic properties of medetomidine.

“Veterinarians routinely utilize sedatives in their daily practice to ensure the safety and comfort of their patients and the hospital team. Current canine sedatives carry some concern for cardiac function while the patient is sedated,” Nancy Zimmerman, DVM, global business development director at Dechra Pharmaceuticals PLC, said in an organizational press release. “[The] combination of medetomidine and vatinoxan addresses 1 of those key concerns about patient safety during sedation by minimizing cardiovascular [adverse] effects.”

The alpha-2 agonist combination has a short duration of sedation—approximately 45 minutes in most dogs, with a mean duration of 38 minutes, according to Dechra.

“The veterinary hospital team can spend less time waiting for the patient to become sedated and recover. More importantly to the pet owner, the dog can return home sooner,” Zimmerman said in the release.

Because of the quick recovery time and less cardiovascular depression, the use of reversal agents may not be needed, which Dechra officials indicated it hopes can save time and decrease costs for clinics.

The new combination sedative is available in 10-mL multidose glass vials through Dechra-approved distributors, according to the company.

REFERENCES


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Rare Przewalski’s horse foal is born in England zoo

A rare male Przewalski’s horse foal was born at the Marwell Zoo in Hampshire, England, on May 28, 2022. From 1969 to 2008, these horses were extinct in the wild, so this marks a noteworthy birth for this endangered species, according to an organizational release.1

Nogger and Speranzer are the parents of this foal, Basil, named after the first male Przewalski’s horse to reside at Marwell Zoo, in the 1970s. This was also around the time the zoo opened in 1972. Thus, the foal’s name is also in tandem with the celebration of this year’s 50th anniversary of Marwell Zoo.1

The foal is remaining close to his mother, and females in the herd are being protective of him. He will play in an important role as part of the European Association of Zoos and Aquaria Ex situ programs.

Przewalski’s foals weigh approximately 66 lb or less at birth. These horses can stand, walk, trot, nibble forage, and neigh within the first day of birth. After the first week, they can begin grazing, engaging in solitary play, and defensive kicking.2

Wild Przewalski’s horses were discovered in the mid-18th century and are native to the Russian steppes, east of Kazakhstan, Mongolia, and northern China.3 Although they are listed as endangered on the International Union for Conservation of Nature’s Red List of Threatened Species, these horse populations have been increasing with the help of zoo breeding programs.4

REFERENCES

Animal disease reporting rules are expected for publication by end of 2022

The American Veterinary Medical Association announced in an organizational release that the US National List of Reportable Animal Diseases (NLRAD) is expected for publication sometime this year. The NLRAD was drafted in March 2020 by the US Department of Agriculture’s Animal and Plant Health Inspection Service (APHIS), with new rules and standards for reporting animal diseases.

The NLRAD regulations would add mandatory disease reporting across the US, with immediate notification to APHIS and state animal health officials. “The information gathered through the NLRAD will provide a national baseline of animal disease across the US and improve early disease detection and response, including emerging pathogens with zoonotic potential, [such as] SARS-CoV-2,” Mike Stepien, APHIS spokesman, said in the release.1

APHIS officials plan to include 2 tiers of diseases. One tier is for notifiable diseases and conditions, for which the agency will require immediate reports when veterinarians or other animal health professionals suspect or identify cases. The second tier is for monitored diseases and conditions, for which state agencies and animal health diagnostic laboratories will describe in monthly reports.1

“If you suspect an emerging animal disease, you must report it as soon as you think an animal or groups of animals are infected,” the draft rule states. “This awareness may be through observation of case-compatible clinical signs, laboratory test–positive samples, or other knowledge of infection.”1

Although the contents of the proposed list are focused on farm animal diseases, it includes some diseases that affect companion animals, zoo animals, wildlife, and endangered agricultural animals. Some notifiable diseases listed by the NLRAD include the following:1

• Highly pathogenic avian influenza, an H5N1 strain that has killed tens of millions of poultry in an epizootic across much of North America in 2022.
• Chronic wasting disease, a neurodegenerative disease spreading among cervids across the US and Canada.
• Rabbit hemorrhagic disease, which has killed unknown numbers of rabbits and hares in the Western US in recent years.
• African swine fever, a highly contagious disease that can kill entire herds and emerged in the Dominican Republic and Haiti in 2021.

“The purpose of the NLRAD is to have consistent animal disease reporting across the United States and to help animal health officials protect the US agriculture infrastructure,” the draft standards states.1

REFERENCE
Cats often try to hide joint discomfort

The patented ingredients in Dasuquin® work to support joint health in cats at the cellular level. Take out the guesswork with a premium joint health supplement, Dasuquin® for Cats.

Order now from your Nutramax representative, authorized distributor, or visit vet-ez-order.com.

Visit WWW.DASUQUIN.COM.
A canine patient receives acupuncture treatment.  Acupuncture therapy is used on a feline patient.

**Acupuncture therapy in pets**

This nonpharmacological form of treatment, rooted in Eastern medicine, can help with a variety of conditions.

Tabitha, an 18-year-old, sweet-natured feline was struggling to move comfortably around the household. Her owner had exhausted many of the options offered to help ease the pain she was experiencing from her arthritic joints. Acupuncture was suggested to Tabitha’s owner and, despite being a slight skeptic about the true benefits this treatment could offer, she scheduled a first acupuncture appointment for Tabitha.

Tabitha was a very cooperative patient and seemed to enjoy her acupuncture visits. After about 6 sessions, Tabitha’s owner noticed a little pep her step and improved movement with less stiffness. The treatments were continued over the course of the year, and the owner observed that Tabitha’s daily life improved as she began to groom better, sleep more comfortably, navigate into the litter box with more ease, and had an increased appetite. Amazingly, Tabitha did not require any pain medications while receiving her acupuncture treatments, and she was able to celebrate her 22nd birthday. Tabitha was a model display of the true benefits acupuncture could provide to our furry companions.

**WHAT IS ACUPUNCTURE?**

Acupuncture has been around for thousands of years. This treatment originated in China, and traditional Chinese veterinary medicine not only includes the practice of acupuncture but also herbal medicine, food therapy, and Tui na (medical manipulation). Approximately 173 acupoints exist in animals and 361 in humans. Acupuncture generally involves the insertion of thin sterile needles into discrete and specific points on the body to cause a therapeutic effect. There are other methods utilized to enhance the effects of acupuncture, including electrical stimulation and moxibustion. Moxibustion utilizes dried plant materials called moxa, which are burned near the surface of the skin to help with treatment of certain conditions. Electroacupuncture uses a mild...
and gentle electric current to pass between the needles placed, causing a stimulation to help enhance the effects of acupuncture for certain conditions.

HELPING PATIENTS USING ACUPUNCTURE

In terms of the effectiveness of acupuncture, there have been several studies that have demonstrated that the stimulation of acupoints leads to the release of β-endorphins, serotonin, and other neurotransmitters. Studies have further indicated that acupuncture can help with pain relief, promotion of tissue healing processes, regulation of gastrointestinal motility, immunoregulation, anti-inflammatory effects, and hormone regulation.

The best part of acupuncture therapy is that the treatment is extremely safe and rarely causes any adverse effects. Some results can be seen immediately, but others will require several treatments. Most animals handle the acupuncture needles very well and often even show a relaxation effect from placement of some of the points. The body has many channels that interconnect and can be stimulated through acupuncture therapy. Many veterinarians who practice acupuncture can use these channels to help several areas of the body, with only a few acupoints.

PRACTICING VETERINARY CARE WITH ACUPUNCTURE

To become a certified veterinary acupuncturist, a practicing veterinarian must undergo extensive training to understand the history of acupuncture, the proper diagnosis of a patient, and the channels and meridians used in acupuncture therapy. There are several tests these trained professionals must complete to become proficient and certified.

In practice, I will often have owners offer an animal’s favorite treat or meal to make it a positive experience during acupuncture sessions. Most sessions will last between 15 and 30 minutes. Some of the most common conditions acupuncture is used for in animals includes musculoskeletal and neurologic injuries, gastrointestinal disorders, allergic dermatitis, lick granulomas, epilepsy, and chronic pain conditions.

CONCLUSION

For those interested in pursuing this treatment for a pet, I would recommend finding a certified veterinary acupuncturist nearby. They will want to review your pet’s full medical history and perform a thorough examination prior to any acupuncture treatments. The acupuncturist may also suggest diet changes or herbal medicine to treat your pet’s underlying issues.

I have found the most success with an integrative approach to treating my patients using elements from both traditional Western medicine (eg, radiographs, ultrasound, antibiotics) and Eastern medicine (eg, acupuncture, herbs). We are fortunate, at the present time, to have numerous options available to help our animals live longer and more comfortable lives.
Why team members’ behavior matters

When it comes to managing patients who are anxious, a calm and understanding demeanor is helpful

The behavior of team members matters in all aspects of a clinic. The overall feel or energy of a clinic can affect a patient as much as the energy of the person helping them. If we relate this to our own experiences, we might gain a better perspective of how someone’s behavior affects another person.

Think about a time when someone was kind to you, whether they opened the door for you or thanked you for something simple—it makes your day, right? On the flip side, think about a time when someone was rude to you. When this happens, it can potentially ruin your day. This applies as much to animals as it does humans.

UNDERSTANDING PATIENTS

Animals are empaths; research has demonstrated that many species of animals can understand and share emotions.1 Of course, this intensifies with the bond of the human in question. However, this relates to how animals can feed off the emotions of those around them and those handling them. If this fact is true, then we can assume that one’s behavior will matter when approaching or touching a pet.

These amazing animals are not only empaths but they also emote their feelings, and we must be in tune with them enough to see what they are showing. It is important to be able to read an animal’s signals so we can appreciate what they are feeling. Reading their feelings is a skill that comes with exposure, observation, and intuition.

There are occasions when it is not clear-cut or obvious, but veterinary professionals can still respect what patients are going through. In this scenario, we are speaking about patients who are anxious. An anxious pet needs calm and understanding behaviors from those caring for the patient.

A FEAR FREE RESOURCE

The Fear Free program is highly informative and beneficial to practices. There are several tracks in the program that are designed to educate and inspire many veterinary industry professionals—from relief veterinarians to groomers—through its mission to reduce fear, anxiety, and stress in patients.

It is important to be able to read an animal’s signals so we can appreciate what they are feeling.

Fear Free provides training tools and learning aids to ensure success for everyone involved in interacting with an anxious pet. Beneficial resources include body language guides that help identify signals in the face, eyes, mouth, tail, ears, and posture of dogs and cats. These signals can show whether a companion animal is relaxed or stressed. For example, stressed dogs and cats may exhibit dilated pupils or a tucked tail.2

ACTING WITH PURPOSE

Once an anxiety or fear response is identified, there are behaviors that can be implemented—and to be mindful of—while handling the pet. These behaviors can result in a great interaction.

1. Be confident. Those who fear or have their own anxiety about a patient should not restrain or be exposed to that patient. Remember animals are empaths; if you’re anxious when handling cats, then do not handle an anxious cat.

2. Be observant. Be mindful of the pet and how they are feeling. Each pet has their signals, even if they may be hard to read.

3. Be calm. Anxious pets need calm energy around them. Excited or high-pitched voices and fast or jerky movements are not appropriate.

4. Be patient. Moving too quickly or aggressively may trigger a fight or flight response. If these appointments take a few minutes longer than usual, so be it. The extra time is worth it.

5. Be gentle. This is critical when it comes to anxiety. The tighter a pet is gripped, the more there is for them to fear. Start with “less is more,” and the response can be amazing.

6. Be understanding. Put yourself in the patient’s frame of mind and try to figure out why they would be anxious.

These are simple behaviors that can help with an anxious pet visit, and there are so many more things that can and will help. The Fear Free program goes in depth when it comes to the best ways to handle and treat these patients. There is so much knowledge to pass on to the owner, as well, that will help pets not be so anxious.

CONCLUSION

In dog training, there is an expression that applies the concept of how our behavior affects the pets we train: The dog feels your energy down the leash. This notion applies to the handling of patients who are anxious, as well. The behavior or energy you emote will directly affect the behavior and feelings of the patient being treated.

Now when reviewing an anxious pet visit, the final interaction is to be positive. If an appointment ends on a positive note, the next appointment will likely start on a healthier footing. Remember that positivity starts and ends with the energy of those in the clinic, not just those who handle the patient. ☀

REFERENCES


written by Sabrina Beck, CVT, CVBL
Beck is a practice manager in Orlando, Florida for Avalon Family Vet, part of the Family Vet Group.

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1 Double-blind, placebo-controlled canine clinical studies with Royal Veterinary College 2015 (Data on file) & School of Veterinary Science, Massey University 2020 (Manuscript in preparation)
2 Study conducted by Royal Veterinary College. Data on file.
3 Kynetec VetTrak, April 2022. Sales of YuMOVE® branded products through veterinary wholesalers. 3. Brand Tracking Study, April 2022
More than 53 million pet dogs (69% of total US dog population) and approximately 47 million pet cats (80% of total US cat population) had been gonadectomized in the US at the time of the most recent Pet Ownership Survey (2016), according to data from the American Veterinary Medical Association. Surgical pain is most effectively controlled using multimodal analgesia, which should include local anesthetic blockade. Advantages of local anesthetics include intraoperative nociception and postoperative pain relief that predictably extends beyond the expected duration of the drug. In general, local anesthetics are inexpensive and easy to use. Local anesthetic techniques for gonadectomies include peritoneal lavage and testicular block, which are both highly effective and easy to perform. This article focuses on testicular blocks. Intraperitoneal lavage was covered in the July 2022 issue of *dvm360®*.

**TESTICULAR BLOCK FOR CASTRATION**

Although called a testicular block, local anesthetic injected into the testicle rapidly diffuses to the spermatic cord and associated structures and provides intraoperative nociception and postoperative pain relief from surgical crushing of the tissue at that site. To perform the block, insert a sterile hypodermic needle (25- to 22-Ga needles of 5/8- to 1.5-in, depending on patient size) into the testicular body, with the needle tip directed toward the spermatic cord. After aspiration to ensure the needle tip is not in a blood vessel, inject half the total recommended dose of bupivacaine, ropivacaine, or lidocaine for the species (Table), or the volume that causes the testicle to become slightly more turgid. Stop injecting when either of those 2 end points are reached. Expect to inject between 0.1 to 2.0 mL per testicle, depending on dog/cat size. A block of the skin at the incision site should be included with the testicular block. In cats, the incision is generally made at a prescrotal site, and the drug should be injected into the skin and subcutaneous tissue at that site. Testicles that have been injected often appear bruised when visualized during surgery. This is inconsequential, as the testicle is being removed and any pain caused from bruising would be minimal compared with the profound effect of the local anesthetic.

### Table. Drug Dosage and Safety

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose/species</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lidocaine</td>
<td>2-4 mg/kg (cats), 4-6 mg/kg (dogs)</td>
<td>Numerous publications of intratesticular lidocaine indicate both safety and efficacy in dogs and cats.</td>
</tr>
<tr>
<td>Bupivacaine</td>
<td>1-2 mg/kg (cats), 2-4 mg/kg (dogs)</td>
<td>Intratesticular bupivacaine administered to dogs provided both intraoperative nociception and postoperative pain relief superior to that of opioids, as evidenced by lower-serum cortisol in the bupivacaine group.</td>
</tr>
<tr>
<td>Ropivacaine</td>
<td>1-2 mg/kg (cats), 2-4 mg/kg (dogs)</td>
<td>Intratesticular and incisional ropivacaine as part of a multimodal protocol in dogs resulted in lower pain scores out to 8 hours postsurgery.</td>
</tr>
</tbody>
</table>

**Advantages of local anesthetics include intraoperative nociception and postoperative pain relief that predictably extends beyond the expected duration of the drug.**

**FREQUENTLY ASKED QUESTIONS**

Is there a concern of uptake of the drug into the bloodstream?

The testicular block is widely used in many species, yet a thorough search yielded no safety studies. Safety could potentially be predicted from studies using injection of local anesthetics into other highly vascularized tissue (eg, in the oral cavity). In this light, this block can be considered safe when, as with all drugs, used at the correct dose and using the correct technique (ie, aspirate before injecting).

Which drugs are preferred for this technique?

The longer-duration drugs, bupivacaine and ropivacaine,
are generally preferred and have been used for this block (Table). However, some clinicians use only lidocaine because the testicles are highly vascularized, potentially increasing likelihood of systemic drug uptake. There is no evidence that one drug is better/safer than another, so the clinician should use experience and comfort with the drugs to decide which drug to use for this block.

Occasionally, in dogs, the scrotum looks very irritated after the block. Any solutions?

The scrotal irritation is more likely due to clipping and scrubbing at the injection site rather than the small-gauge needle insertion. The scrotum does not require clipping and scrubbing for this technique, just as a vaccination site does not need to be clipped and scrubbed. The worry is further decreased, as the testicle will be removed. Another option is to slide the testicles under the skin up toward the surgical incision site and inject them through the abdominal wall instead of through the scrotum.

How long do I have to wait before starting surgery?

In a study in pigs, maximum lidocaine concentration was achieved at the spermatic cord within 3 minutes of injection.6 Bupivacaine and ropivacaine could take slightly longer.

Any special considerations for cats?

No, as with most science, there are fewer publications for cats, but the block is widely used.

REFERENCES
The veterinary profession faces a staffing shortage. Veterinarians and technicians are busier than ever, feeling overworked and experiencing a burnout epidemic. According to the American Veterinary Medical Association (AVMA), nearly 26% of veterinarians in 2021 expressed the desire to work fewer hours. AVMA surveys indicate that 44% of veterinarians have considered leaving the profession, with stress, anxiety, and work-life balance commonly cited as reasons.

In short, veterinary professionals are feeling the pressure with little relief on the horizon. Enter virtual assistants from SaiberVet—an easy way to bolster clinic staff and save money. Here’s what virtual assistants bring to the equation when assessing how they may fit into a clinic’s hiring plan:

1. Save time and enhance work-life balance
A virtual assistant can take on the majority of tedious administrative tasks for a clinic in its day-to-day operations. Dealing with reminder and confirmation calls can be another time consumer for busy clinicians. However, virtual assistants can contact clients directly to set up and confirm appointments as well as managing patient and client information, answering client emails, completing prescription refill requests and many other customer service related tasks.

Time is money, and time spent taking notes is time spent not seeing patients. A representative from SaiberVet said their doctors are reporting that they see an average of 4 to 5 more patients per day, thanks to outsourcing this task. As an added bonus, delegating administrative tasks to a remote virtual assistant can help clinicians and staff to finish work on time, relieving pressure and maintain work-life balance. When staff can avoid staying late and the stress of a massive crunch at the end of the day, everybody wins.

2. Save money
A virtual assistant directly affects the bottom line in 3 simple ways: more office space, lower hiring costs, and lower labor expenditures. With a remote worker, the space gains are self-explanatory. This allows the clinic more room to focus on medical or client-facing features.

Hiring a virtual assistant with SaiberVet is as simple as signing up for an online service. One need not waste time or money on job boards, advertising, and vetting candidates; the virtual assistant service has already selected the best candidates for the position. Additionally, the practice will save money on labor-related costs such as equipment, taxes, health benefits, office supplies, and more. Virtual assistants generally cost no more than $10 an hour, without health insurance, PTO, taxes, and all of the other hidden costs that come with hiring an in-person employee. In contrast the average wage of a veterinary assistant or client service representative can be up to $17-$18 per hour. A virtual assistant would be a 41% reduction in wages compared to an in-person assistant, before even calculating all of the other costs of employment mentioned above.

3. Choose the right candidate
Every veterinary practice has its own unique culture, and proper fit is important. That’s why practices are not assigned a virtual assistant, but rather may interview candidates until they find the right match. Practices don’t have to settle for “just anyone” to alleviate their staffing shortages. Instead, they can choose the candidate that will be the best addition to their business.

4. Work with the same person every day
Continuity and predictability is vital for any business. That’s why virtual assistant services allow the practice to work with the same medically trained professional every day, ensuring a solid working relationship and rapport between all parties. Once a practice finds the right person to add to their staff, they can enjoy the benefits of a virtual assistant long-term, without worrying about going through the hiring and interviewing process again.

A representative from SaiberVet said a veterinary hospital subscribing to their service may work with the same assistant for as long as 7 years.

5. Concierge customer service
SaiberVet offers concierge customer service throughout the entire hiring process. Customers are assigned an account manager that will walk them through the entire process from start to finish. Hiring new team members can be very time consuming: placing job advertisements, calling people to schedule interviews, training new hires, and dealing with time management issues can eat up time in the schedule that busy practice owners just don’t have. With concierge customer service, the hiring process becomes quicker and easier.

**WHAT IS A VIRTUAL ASSISTANT?**
Hiring a virtual assistant means simply outsourcing the clinic’s typical assistant tasks to a remote administrative professional. Using the internet, the virtual assistant can answer calls, file paperwork, schedule appointments, and handle other tasks of an in-person assistant. They can also be in the exam room virtually, handling tasks such as taking notes and creating treatment plans while the doctor completes their physical exam and discusses patient care with the client.

This means the veterinarian can spend more time focusing on high-quality care for the patient while being present and attentive to the client. The virtual veterinary assistant fills the gap of a physically present assistant, retaining the flexibility of an on-demand service at a cost lower than an in-clinic hire.

**5 KEY BENEFITS OF A VIRTUAL ASSISTANT**
The staffing needs of veterinary hospitals may prove unique to the situation of each clinic and its clientele. The best staffing solution for an individual hospital may involve any combination of full-time, part-time, or virtual assistants. Here’s what virtual assistants bring to the equation when assessing how they may fit into a clinic’s hiring plan:

**A turnkey solution to addressing the staffing shortage: virtual assistants**
Delegate busywork and spend more time on what matters most

Written by Bob Alaburda, Senior Editor

**References available online at dvm360.com**
Targeted injectable therapy for canine elbow osteoarthritis

Industry-leading lecturers share an emerging approach for multimodal osteoarthritis treatment

written by Bob Alaburda, Senior Editor

Osteoarthritis (OA) is a common diagnosis that can be severely debilitating for a pet’s mobility and quality of life. Managing this progressive and degenerative disease process has evolved over the years as research reveals new therapies as part of a multimodal approach. Two sessions, both sponsored by Synovetin OA, at the Directions in Veterinary Medicine conference in Indianapolis, Indiana, addressed OA management and highlighted modalities the speakers have brought into their own practices.

RADIOSYNOVIORTHESIS: TARGETED INJECTABLE THERAPY FOR ELBOW OA

Matt Brunke, DVM, DACVSMR, CCRP, CVPP, CVA, and Kirsty Oliver, VN, DAVN (Surgical), CVT, CCRP, CVPP, VTS (Physical Rehabilitation), delivered a joint session titled “Injectable Therapy for Canine Elbow Osteoarthritis.” Brunke focused a portion of his talk on a technique radiosynoviorthesis (Synovetin OA) as novel therapy approved for elbow OA management in canines. This therapy is an injection of radioactive Tin-117m that decreases macrophages and subsequently decreases synovitis, which is associated with the pain and inflammation at the heart of OA. Brunke addressed the concept of targeted therapy in a previously recorded episode of dvm360 Live!®, in which he said, “If you only have 1 arthritic joint, why are we giving systemic meds? [Although they are] safe and efficacious, there’s a chance they could have issues. If your only issue is in 1 elbow, then why not approach that?”

HOW DOES IT WORK?

Although some therapies tend to treat OA by reducing inflammation or targeting the pain receptors, the aim of radiosynoviorthesis is to address the underlying disease state.

Radiosynoviorthesis employs microparticles of the novel radionuclide, Tin-117m, which are suspended in a colloid and injected into the joint. The Tin-117m microparticles stay in the joint and emit low-energy conversion electrons with 0.3-mm range of activity. This provides targeted, nonsystemic therapy without clinically significant local or systemic adverse effects, according to the manufacturer. Inflammatory macrophages and synovia sites selectively engulf the microparticles and are deactivated by the conversion electron energy. The microparticles remain active and are engulfed again by nearby synovia sites and macrophages for sustained action against inflammation. The microparticles decay to harmless inert tin, with clinical effects lasting up to a year with a single injection, according to the manufacturer.

Brunke and Oliver said this treatment is a valuable addition to their multimodal approach to OA. “The treatment for [OA must] be multimodal… We are past the days when…we just give some [nonsteroidal anti-inflammatory drugs] and tell them to rest for 10 to 14 days. We’re better than that; we can do better than that,” Oliver said during presenting her session titled "Introduction to Rehabilitation: The What and How-tos of Physical Rehabilitation.”

RESULTS IN PRACTICE

Oliver said she and Brunke have used this technique on 80 patients so far, for a total of 137 joints (mostly dog elbows) in their practice and have been seeing improvements to mobility and pain that last upward of 12 months. “[Regarding] efficacy, this has been my game changer—hands down,” Brunke said. “Instead of gaining 5 or 10 degrees of range of motion, which is clinically relevant, we’re gaining 20 to 30 degrees of range of motion within a month. Our lameness scores are dropping from 3 to 1 within 2 months, [which] has been beneficial.”

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Malassezia is a genus of lipophilic yeast found as a commensal of the skin and mucosal surfaces that may cause skin disease in a variety of mammalian species. In healthy dogs, these organisms are present in small numbers on the skin (fold areas/lip, vulvar, axillae, interdigital), oral and anal mucosal surfaces, in the ear canals, and the anal sacs. In contrast to Candida, Malassezia dermatitis (MD) has not been associated with recent antibiotic administration; in fact, there appears to be a symbiotic relationship between the surface staphylococcal organisms and the yeast. It is theorized that the organisms produce growth factors and microenvironmental changes (eg, inflammation) that are beneficial to each, so it is not uncommon to see concurrent infections with Malassezia and staphylococcus.

Why do animals develop MD? There have been numerous studies comparing the strain of Malassezia organisms found on the skin of affected dogs vs the skin of unaffected dogs. It was previously believed that there is no difference in virulence and/or adhesion in Malassezia organisms found on the skin of affected dogs vs the skin of unaffected dogs, but this belief has recently been challenged. One study found that phospholipase activity of Malassezia was highest in dogs with generalized disease as opposed to dogs with localized disease or healthy patients. This finding suggests that phospholipase activity may play a pathogenic role in the occurrence of skin lesions caused by Malassezia, thus contributing to its virulence. Despite this study, virulence alone doesn’t appear to completely explain MD. Both type I and type IV hypersensitivity reactions to Malassezia have been found in dogs with MD. It seems that the host response is the crucial factor for the development of MD. With Malassezia overgrowth, there are a variety of events that occur that can contribute to cutaneous inflammation. The metabolism of the surface free fatty acids by lipases produced by Malassezia leads to the production of inflammatory eicosanoids, changes in the cutaneous pH, and decreases in the normal cutaneous barrier function. Because of the percutaneous absorption of the Malassezia antigen, complementary activation may occur. Disorders that affect the barrier function of the skin (eg, pruritus) or the cutaneous lipid content (eg, hypothyroidism) are risk factors for developing MD.

**SIGNALMENT**

There is no age or sex predilection.

**HISTORY**

MD is always secondary to another skin disease. A clue that MD may be present is a change in the clinical features and/or the previously effective therapy of the underlying disease becomes ineffective. For example, seasonal pruritus becomes nonseasonal; the distribution of the pruritus changes to involve areas atypical for atopic dermatitis (eg, ventral neck), becomes poorly responsive to a previously effective antibiotic, and/or the effectiveness of glucocorticoid therapy is decreased. Any allergic animal whose pruritus (intensity or distribution) or the therapeutic responsiveness of the pruritus changes suddenly should be evaluated for MD, pyoderma, and ectoparasites.

**CLINICAL FINDINGS**

On physical examination, lichenification, erythema, greasy exudate, dry scale, papules, plaques, alopecia, follicular casts, paronychia, hyperpigmentation, or alesional, intense muzzle pruritus may be present. Moist dermatitis with a musty odor is not an uncommon clinical finding. Pruritus may vary from mild to intense, and erythema may be present with minimal pruritus, especially interdigitally. The lesions may be focal or generalized, and the distribution of the lesions overlap with other pruritic diseases. Any area may be affected, but some of the more common areas include interdigital, intertriginous areas, face, nail folds, perioral (lateral muzzle), pinna, and flexor surface of the elbow.

**DIAGNOSIS**

MD may cause folliculitis that is clinically identical to staphylococcal pyoderma. Therefore, if there are follicular papules, epidermal collarettes, or lichenification, one cannot assume there is a bacterial component to the skin disease without performing skin cytologies. Remember >>
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to include skin scrapings for ectoparasites as part of your minimum database, as demodicosis is also a follicular-oriented disease.

Identifying Malassezia organisms (budding yeast) from the affected area is necessary to establish a diagnosis of MD. Tape impression or direct impression smear are the most common methods used for sampling affected areas. Because of the ease of collection, the former may be preferred. If the skin is dry, a scalpel blade or the edge of a glass slide is used to scrape the surface for sampling. If using slides for an impression smear, there is no need to heat fix the sample nor to use all 3 stains that are part of the Diff-Quik procedure. Using just the third stain (methylene blue) is adequate and will make processing the slide faster. A faster approach would be to take a tape impression, place a drop of the methylene blue Diff-Quik stain on the slide, then lay the tape on top of the stain. Use the tape as a coverslip and examine the sample after placing oil immersion on top of the tape.

The question is: How many is too many organisms? An earlier report found that healthy dogs had 1 yeast per 27 oil fields. In my experience, MD is diagnosed when a dog has clinical signs compatible with MD and has on cytology, any field that has more than 1 organism, or if there is 1 organism every 5 to 10 fields (1000x). The American College of Veterinary Dermatology task force on atopic dermatitis discussed MD as a complication of atopic dermatitis. The task force states that "surface cytology of the skin and ear is useful to determine whether Malassezia or Staphylococci are present at lesional sites. Making antimicrobial treatment decisions based solely on microbe numbers is incorrect and inappropriate."

The article goes on to discuss that the host response to these normal organisms determines the severity of clinical signs. Their recommendation was "the result of cytology might better be limited to the sole report of presence or absence of detectable bacteria or yeast." This is because of the reported poor repeatability and reproducibility of microscopic examination of adhesive tape strip cytology for counting Malassezia organisms.3

The interesting question is: Why can’t I find yeast when I’m sure the dog has MD? Site selection has a significant impact. Because Malassezia is a surface organism whose numbers may be decreased by the animal’s licking, multiple sites must be sampled, and because even small numbers of organisms can be significant, numerous fields must be examined. Lastly, interpretation of the number of organisms from skin cytology is very different than interpreting ear cytologies, in which 1 or 2 organisms may be interpreted as negative or rare and is of no clinical significance. This interpretation is not correct when evaluating skin cytologies.

**TREATMENT**

To prevent the recurrence of MD, the underlying cause must be identified and treated. As previously mentioned, any disease that disrupts the barrier function, the lipid content of the skin surface, the cutaneous microclimate, or host defense mechanisms may predispose the animal to MD. These include hypersensitivities (atopy, cutaneous adverse food reactions), ectoparasites (Demodex, Sarcoptes, and fleas), endocrinopathies (hypothyroidism, hyperadrenocorticism), metabolic diseases (metabolic epidermal necrosis), neoplasia (cutaneous T-cell lymphoma), and excessive skin folds. Genetic factors, as seen in Basset Hounds, predispose them to maintain a higher number of Malassezia organisms on their skin, putting them at higher risk for developing MD.

Unless the MD is very focal, both topical and systemic therapy may be preferred. This combination will be the most successful treatment for MD. Determining how much of the pruritus is from the MD and how much is from the underlying hypersensitivity is important in helping direct the next step. If treatment of the MD completely resolves the pruritus without any concurrent antipruritic therapy, either the dog has seasonal atopic dermatitis and the season has changed from the allergy season to the nonallergy season, or the dog has an underlying endocrinopathy. On the other hand, if the pruritus continues despite the resolution of the MD, then the dog has atopic dermatitis (nonsessional)

There are a variety of active topical agents, including selenium sulfide, miconazole, ketoconazole, clotrimazole, and chlorhexidine. A review article revealed convincing evidence of the effectiveness of the shampoo combination miconazole/chlorhexidine (Malaseb). More studies are needed to further evaluate the value of some of the other available topical products. In my experience, any shampoo that contains at least 3% chlorhexidine or has 2% chlorhexidine combined with an azole is effective. If these shampoos are ineffective, selenium sulfide–containing shampoo has been beneficial. More recently, when topical therapy with these previously listed ingredients occurs, I have been using a shampoo containing piroctone olamine (Keratolux). Piroctone olamine has reported antibacterial and antifungal properties. However, it is unclear how effective this ingredient is at this time due to the limited number of cases that have been treated with this product. In a recent consensus guideline on the treatment of MD, piroctone olamine products were listed as having insufficient evidence to recommend because no randomized controlled studies had yet been done.

Shampooing should be followed by a leave-in conditioner containing an antifungal ingredient, such as miconazole, ketoconazole, terbinafine, or clotrimazole. Note for MD affecting the face folds of brachycephalic breeds of dogs, miconazole vaginal cream is a nice choice because it is safe even if it gets into the eyes (ophthalmologists use it for fungal keratitis in horses). Depending on the severity and extensiveness of the lesions, the frequency of application varies from daily to 3 times a week.
IMPORTANT SAFETY INFORMATION: VETMEDIN is for use in dogs with clinical evidence of heart failure only. The most common side effects reported in field studies were poor appetite, lethargy, diarrhea, dyspnea, azotemia, weakness, and ataxia. VETMEDIN should not be given in case of hypertrophic cardiomyopathy, aortic stenosis, or any other clinical condition where an augmentation of cardiac output is inappropriate for functional or anatomical reasons. For more information, please see full prescribing information.

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• In the US, VETMEDIN has supported over 1 million dogs3

• Recommended by the ACVIM as part of standard treatment for dogs with congestive heart failure4

Ketocanazole (200 mg tablets) 7 to 10 mg/kg once daily (rarely twice daily) is the systemic drug of choice and is to be given with a small amount of fatty food for increased absorption. If the dog does not tolerate ketocanazole (e.g., gastrointestinal disturbances), iraconazole 5 to 10 mg/kg (do not use doses > 10 mg/kg, as it has been reported to increase the risk of adverse effects such as anorexia, hepatotoxicity, and vasculitis) given 2 consecutive days/week is also effective. Do not use compounded iraconazole, as it has poor bioavailability. Generic formulation is effective, but if compounded from bulk chemical, it is not. In cats or dogs, if using the capsule formulation, it should be given with a fatty meal. If using the liquid formulation, it is best to give without food to allow for optimal absorption. In cats, the liquid formulation is better absorbed than the capsule form, allowing a 50% reduction in dose. This is not true for dogs, in which the absorption is equal between the liquid and capsule formulations.

I rarely use fluconazole 5 to 10 mg/kg once daily (rarely twice daily), except in small dog. Because it comes in a 50 mg tablet, it is more amenable for dosing small dogs. In contrast to ketocanazole and iraconazole, fluconazole does not require an acidic environment for oral absorption, therefore it can be given with or without food.

Terbinafine 30 to 40 mg/kg once daily may be useful in dogs who are on multiple medications because, in contrast to the azoles, terbinafine has fewer drug interactions. Treatment should be continued for 14 days beyond clinical resolution based on your examination (not a phone call) and cytology, with a minimum treatment time of 21 days. Please note that griseofulvin is ineffective against Malassezia.

Be sure to evaluate the dog for concurrent superinfection, as it is not uncommon to have both MD and bacterial foci present concurrently. In cases of concurrent superinfection, bacterial pyelonephritis, because the shampoo therapy that was discussed above is active against bacteria, antibiotic therapy may not be necessary.

References:
The many facets of hypertension

High blood pressure silently weaponizes flowing blood, turning key organs into targets. By detecting the often subtle clues to its havoc, veterinarians can recognize cats and dogs at risk.

A silent marauder whose stealth is matched by its scope throughout the body, high blood pressure weaponizes flowing blood, turning key organs into targets. By detecting the often subtle clues to its havoc, veterinarians can recognize cats and dogs at risk of hypertensive assault.

The cardiovascular system supplies the body with life-sustaining blood by generating adequate intravascular pressure to perfuse the tissues. If the pressure slumps, the organs may not receive suitable perfusion. But if it swells, they can suffer barotrauma.

The rate and force at which blood courses through the body combine with the diameter and elasticity of the vessels to create blood pressure (BP). Systolic BP (the maximal pressure against the walls of the arteries) is produced by cardiac contraction. Diastolic BP (the minimal pressure against the arterial walls) occurs as the heart refills.

HOW HIGH IS HIGH?

Studies show systolic BP (SBP) ranges from 131 +/-20 to 154 +/-31 in clinically healthy dogs\(^1\)\(^2\) and runs slightly lower in healthy cats.\(^3\) Elevated pressures can cause target organ damage (TOD) that, according to the Veterinary Blood Pressure Society, tracks along with the severity of hypertension. Pressures above 150/95 pose risk for end-organ injury and may warrant intervention as follows:\(^4\):

- Normotensive (minimal TOD risk): SBP < 150 mm Hg
- Prehypertensive (low TOD risk): SBP 150-159 mm Hg
- Hypertensive (moderate TOD risk): SBP 160-179 mm Hg
- Severely hypertensive (high TOD risk): SBP > 180 mm Hg

TARGET ORGANS

The organs most vulnerable to hypertensive harm are the eyes, brain, heart, and kidneys.

Eyes

Ocular conditions, including retinal detachment, papilledema, hyphema, and glaucoma, are the most common hypertensive injuries in cats. Prevalence rates for hypertensive retinopathies and choroidopathies in cats are as high as 100%\(^5\)\(^6\) but are also significant in dogs.\(^7\)\(^8\) Retinal detachment is the most frequently observed finding in both species, and acute onset of blindness may be the presenting complaint.\(^9\)\(^10\)\(^11\)

Brain/cerebrovascular system

Hypertensive encephalopathy can occur in dogs\(^12\)\(^13\) and cats.\(^14\) Clinical signs, possibly related to hemorrhage and/or infarct, include seizures, altered mentation, weakness, and vestibular problems.\(^15\)\(^16\) Neurologic issues have been reported in up to 46% of hypertensive cats.\(^17\) They are more likely to occur with a sudden jump in BP, a pressure exceeding 180 mm Hg, or both; they often resolve if hypertension is treated early.\(^18\)

Heart/cardiovascular system

Hypertension raises the load against which the heart must contract, sometimes leading to thickening of the heart muscle and cardiomegaly. In cats and dogs, this most often manifests as left ventricular concentric hypertrophy.\(^19\) In cats, sustained hypertension causes cardiomyopathy at a rate of 60%\(^20\) but rarely progresses to heart failure.\(^21\)\(^22\)\(^23\) Systolic heart murmurs and arrhythmia may be detectable on examination, with some patients presenting with exercise intolerance and—less frequently—epistaxis\(^24\)\(^25\)\(^26\) associated with vascular hypertensive injury.
Kidneys

Elevated systemic BP can damage the delicate vascular beds in the nephrons. Renal vessels then constrict, and glomerular filtration drops, resulting in sodium retention and—in a destructive feedback loop—water retention that can further elevate BP. Increased glomerular pressure leads to sclerotic changes in the glomeruli, enabling protein to leach out. Proteinuria likewise hastens progression of chronic kidney disease and shortened survival times.

Although it ravages sensitive vascular networks in key organs, hypertension usually does not announce itself with a clinical bang, such as a nosebleed or a seizure, sudden blindness, or even polyuria/polydipsia. Hypertension is alarmingly silent, and its damage to target organs occurs in increments over time.

TRIAD OF HYPERTENSION

Hypertension is categorized into 3 types: situational, primary, and secondary.

- **Situational hypertension** is fleeting and brought on by environmental stressors. The psychological jolt generated by a visit to the veterinarian can prompt the autonomic nervous system to drive up BP. Anxiety-induced rises in BP can lead to erroneous diagnosis and unnecessary treatment.

- **Primary (or “essential”) hypertension** occurs without underlying triggers.

- **Secondary hypertension**, which accounts for more than 80% of cases in dogs and cats, is characterized by persistently elevated BP concurrent with precipitating disease (or therapeutic agent).

Etiologies include acute and chronic kidney disease, hyperthyroidism, hypothyroidism, hyperadrenocorticism, hyperaldosteronism, pheochromocytoma, and diabetes.

Of these, chronic kidney disease has the strongest association with hypertension: both cause and effect for one another, the 2 are inextricably linked. Among other things, diseased kidneys are unable to properly couple the excretion of salt and water with changes in blood volume. And they inappropriately activate the renin-angiotensin-aldosterone system (RAAS), which further spikes blood volume.

The main iatrogenic causes of secondary hypertension are glucocorticoids, mineralocorticoids, and erythropoietin.

TALLYING TENSION

The American College of Veterinary Internal Medicine (ACVIM) advocates BP screenings every 6 months for animals with the underlying diseases. Readings should also be performed in geriatric (over age 9 years) and/or obese cats and dogs, as well as those exhibiting clinical signs compatible with hypertensive end-organ damage, such as retinal hemorrhage, ataxia, dyspnea, and proteinuria.

Measurements should be conducted in a quiet room with the owner present, if possible. The patient should not be sedated and allowed to aclimate to the examination room for 5 to 10 minutes before testing, and minimally restrained for positioning in sternal or lateral recumbency.

Although direct BP measurement—which involves arterial catheterization—is the gold standard, it is not practical. In the clinical setting, noninvasive, indirect techniques are used: Doppler devices utilize ultrasound waves that detect blood flow; oscillometric units monitor arterial pulse waves.

Proper cuff selection is key to obtaining accurate measurements. For Doppler and oscillometric techniques, the cuff width should be 30% to 40% of the circumference of the cuff site (leg or tail).

ACVIM recommends obtaining 5 to 7 values and discarding the first. Measurements should be repeated until values are consistent. Values are then averaged into a single number.

Readings are not always straightforward, and can be altered by measurement method, operator experience, patient position, gender, age, breed, and temperament. Aging dogs have been shown to experience a 1 to 3 mm Hg per year, and cats 0.4 to 0.1 mm Hg per 100 days.

In sight hounds (ie, greyhounds), pressures run 7 to 20 mm Hg higher than in other canine populations, attributed to situational rather than true hypertension.

Animals deemed truly hypertensive should be retested at least twice over 4 to 8 weeks. For severe hypertension, however, testing should be completed within 2 weeks to meet the risk of target organ damage. If organ injury, such as retinopathy, is already present, treatment should be initiated after the first measurement session, with results confirmed over subsequent visits.

EASING THE PRESSURE

Where secondary hypertension is present, the underlying disease should be treated first. Although it may lower BP and render the patient’s hypertension more amenable to treatment, this alone will rarely make the patient normotensive. Medications are usually required:

- **Angiotensin-converting enzyme (ACE) inhibitor** (ie, enalapril, benazepril): RAAS inhibitors, initially drug of choice in dogs, less effective in cats.

- **Angiotensin II receptor blocker** (ie, losartan, telmisartan): RAAS inhibitors, first-line antihypertensive agents in dogs.

- **Aldosterone antagonist** (spironolactone): RAAS inhibitor, antiproteinuric, usually initial drug of choice in dogs, less effective in cats.

- **Calcium-channel blocker** (amlodipine): Inhibits vasoconstriction; treatment of choice in cats, used as monotherapy or combined with ACE inhibitor or angiotensin-receptor blocker in dogs, used in multiagent therapy only, combined with ACE inhibitors.

- **α1-adrenergic blocker** (prazosin, phenoxbenzamine): Produce vasodilation; adjunctive therapy for dogs when initial antihypertensive is inadequate.

- **β-blocker** (atenolol): Slows heart rate, lowers BP; add-on treatment for dogs and cats when initial antihypertensive agent falls short of desired effect.

- **Direct vasodilator** (hydralazine, acetazolamide): less commonly used to manage hypertension, except for emergency situations.

- **Thiazide diuretic** (hydrochlorothiazide): used in minority of patients in whom volume expansion is clinically apparent.

Hypertension related to certain conditions may be best addressed using specific types of agents, such as α-adrenergic and β-adrenergic blockers in cases of pheochromocytoma or aldosterone-receptor blockers in animals with adrenal tumors.

Medical management of hypertension can be augmented by weight loss in obese patients, and dietary salt restriction. In managing hypertensive patients, the goal is to achieve gradual drops in systolic pressure to less than 170 mm Hg. BP checks should be performed every 2 weeks, along with corresponding changes in dosages and/or drugs. Once regulated, SBP should be rechecked every 3 months and blood work performed annually.

References can be accessed at dvm360.com
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A dozen veterinary professionals are being recognized for their professional achievements—and for making a difference in the industry—as recipients of the second annual Veterinary Heroes™ awards. These honorees will be celebrated Thursday, August 25, 2022, with a celebratory gala in Kansas City, Missouri, in conjunction with the Fetch dvm360® Conference to be held August 26-28, 2022, in Kansas City.

Sponsored by Clevor, Blue Buffalo Natural, Phovia, Dr. Treat, Merck Animal Health, and Zoetis, the 2022 Veterinary Heroes™ program recognizes veterinary professionals who make a measurable difference in elevating the lives of their patients, clients, and colleagues. Award candidates are nominated by their peers and recipients are selected by a panel of distinguished judges.

The 2022 honorees are being recognized in 12 categories: client service representative, dermatology, emergency medicine, feline medicine, equine medicine, general practitioner, internal medicine, nutrition, oncology, practice manager, surgery, and veterinary paraprofessional. This year’s honorees are as follows:

### CLIENT SERVICE REPRESENTATIVE

**Mary Beth LaBee, hospitality coordinator**
Gulf Coast Veterinary Specialists, Houston, TX

LaBee grew up in a household filled with animals before she got her own job as a veterinary clinic receptionist at the age of 19. “The connection with the pet parents [and] the animals is significant, and [this job is] all I’ve ever wanted to do,” LaBee said in an interview with dvm360®.

LaBee expressed her deep level of passion for this kind of work and is grateful to be recognized for her hard work in the veterinary field. She noted that she has seen many individuals in the veterinary field struggle staying in the industry long term. With almost 35 years of experience, LaBee expressed just how important these recognitions can be. “A lot of [individuals] that far into their career are losing their zest for it. To still be recognized, be thought of that way, and affect clients that way—it makes me very proud,” she said.

The key to being a compassionate client service representative and hospitality coordinator comes from the strong and genuine relationships formed with the client, according to LaBee. When she no longer feels that compassion, she knows it’s time to leave the field, she explained. “Most [clients] I’ve known for many years because we see them through multiple pets...seeing clients more and more [helps with] forging those relationships. [The clients] feel like they’re coming to see their friend,” she said.

### DERMATOLOGY

**James Noxon, DVM, DACVIM (SAIM), Morrill professor, veterinary clinical sciences**
Iowa State University College of Veterinary Medicine, Ames, IA

Noxon has been an exemplary faculty member at Iowa State University College of Veterinary Medicine, being promoted to Morrill professor in 2015 for “outstanding performance in teaching and learning,” according to his nominator. He has served as an inspiration, supporter, and mentor for his veterinary students, both while they are in the classroom and after they have graduated, over his 40-year career at prestigious veterinary schools. His passion for dermatology and his fun approach to teaching has been impactful to his students.

“My biggest accomplishment is my students. I adore my students. They reflect on me, on us, on the profession, [and] on our university. They’re wonderful [individuals], for the most part. What better accomplishment could you ask for? I love to see them out there. I love going to meetings and seeing our graduates and former students of mine just to find out what they’re doing with their lives. I hope they’re successful, but I also hope they’re happy. Being happy is more important than being successful,” Noxon said.

Along with his notable teaching, Noxon is renowned in veterinary dermatology for his expertise in otology and the management of ear diseases. He is a graduate of the 1976 class of College of Veterinary Medicine and Biomedical Sciences at Colorado State University. As a past president of the Academy of Veterinary Dermatology (AAVD), Noxon has received an array of noteworthy awards, including being a 2-time winner of the Carl J. Norden Distinguished Teacher Award and receiving the Frank Král Award for Achievements in Veterinary Dermatology from the AAVD in 2015.
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EMERGENCY MEDICINE

Elizabeth Rozanski, DVM, DACVIM, DACVECC, associate professor and practitioner
Cummings School of Veterinary Medicine and Henry & Lois Foster Hospital for Small Animals, Tufts University, North Grafton, MA

Rozanski teaches toxicology and respiratory medicine with the emergency and critical care track at Cummings School of Veterinary Medicine at Tufts University. She is also an active veterinarian practitioner at the university’s Henry & Lois Foster Hospital for Small Animals. Rozanski previously earned her veterinary degree from the University of Illinois, completed a rotating internship at the University of Minnesota, and performed her emergency and critical care residency at the University of Philadelphia.

In addition to her contributions in training residents in emergency and critical care, Rozanski also has advanced the field of veterinary medicine with a plethora of published research and is an author of multiple books, including Small Animal Emergency and Critical Care: Case Studies in Client Communication, Morbidity and Mortality and Small Animal Emergency and Critical Care Medicine: A Color Handbook. She is a leading national and international lecturer and a diplomate of the American College of Veterinary Emergency Critical Care, where she is a leader and contributing author in most of the college’s collective initiatives. Her interests in the treatment of patients with respiratory emergencies has resulted in her reputation as an expert in bronchoscopy and airway diagnostics, as well as the treatment of airway collapse.

Rozanski is known for supporting and uplifting those around her. Other faculty turn to her for help with their own animals, and students and residents lean on her for assistance with research. Her nominators say she selflessly gives her time, money, and energy to support her technicians, residents, and clients. She often takes work shifts on holidays, even though she is the senior faculty member in the service. One of her nominators said, “To Liz, there are no unimportant people or unimportant animals; everyone is deserving of support. This makes her a hero and deserving of this award.”

On what makes emergency medicine special, Rozanski said, “You get the best of all worlds of the mission of veterinary medicine, and you get to be there when they really need you. It’s a rewarding profession from that standpoint.”

EQUINE MEDICINE

Teresa Crocker, DVM, CVA, VSMT, owner and veterinarian
North Coast Equine, Santa Rosa, CA

Crocker graduated from the University of California (UC), Davis School of Veterinary Medicine. Relentless in her support of horses, she has a particular soft spot for geriatrics in need. Crocker is also a well-known advocate for her colleagues, serving as the head administrator for a private Facebook group, Equine Vet-2-Vet. The group was designed for equine veterinarians and serves as an international, open-minded forum of discussion and case sharing, supporting both experts and graduates and offering them invaluable information that ultimately benefits horses and their owners.

With skills in triage, disaster, and human management, Crocker has worked alongside the Federal Emergency Management Agency, the National Guard, and first responders to bolster her understanding of command structure and incorporation of veterinarians into national disaster relief. She had first-hand experience escaping this kind of atrocity when her family and pets fled their home as it was consumed by the California wildfires. She endured the hardship with grace and dignity, according to a nominator.

Crocker currently provides care for companion animals as an owner and veterinarian at North Coast Equine, which is a mostly-mobile practice. She has a special interest in equine internal medicine, dentistry, and geriatrics, as well as chronic, active disease. She supports an individualized approach and enjoys taking on the tough cases to help those animals find solutions and improve their quality of life. Crocker volunteers as a veterinarian for the HALTER Project, an organization for emergency and disaster planning and relief for pets and equines. She is also an educator and mentor at UC Davis and serves on the Institutional Animal Care and Use Committee at Sonoma State University.

FELINE MEDICINE

Jennifer Conrad, DVM, founder and director
The Paw Project, Santa Monica, CA

For over 20 years, Conrad has been on a mission to inform the public on the painful and crippling impacts of declawing in both big and small cats. The initiative supports animal welfare by promoting declaw bans in the United States and Canada and rehabilitating cats who have undergone this surgery. Despite powerful backlash, the organization has successfully sponsored anti-declawing legislation in the states New York and Maryland, plus in 4 US counties, and 12 cities nationwide. The Paw Project has helped end declawing in 8 of the 10 Canadian provinces, and legislation is pending in the other 2.

A graduate of UC Davis School of Veterinary Medicine, Conrad began her journey in 1999 working with lions, leopards, tigers, and other big cats at an animal sanctuary. She quickly witnessed the detrimental effects of declawing and discovered how to repair the amputation, helping these charismatic creatures so they could comfortably walk again. From there, she decided to champion for these animals from a grassroots approach: by striving to abolish feline declawing altogether.

“I started to do [these paw repair surgeries] one after the other on these big cats and I thought, ‘Wow, this is remarkable,’ because as a veterinarian, you want to do the best you can for an animal and change their lives for the better. I thought these animals who have been lame for so long and are crippled are so much better after they get surgery,” Conrad said.

“I took this female lion to have her paws repaired, and she had been flat footed. That same day, the deputy to the mayor of West Hollywood came to visit me because word got out about what I was doing—about how miraculous it was that these cats could walk again,” she said. “I said to the deputy mayor, ‘Why don’t we just make it illegal to declaw cats in West Hollywood? We can do something so I don’t have to keep repairing.’ He thought it was a good idea. And lo and behold, that’s when it all started.”
Our goal is to enrich all aspects of the veterinary community. That means supporting the veterinary professionals of today and the heroes of tomorrow through initiatives designed to help them thrive.

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Price expressed her pride in being a woman business owner. However, she explained being the clinic’s only practitioner can also create challenges. “It’s hard because you don’t have another person here all the time to bounce ideas off of if you run into difficulties with a case…it’s hard because of the very large workload for 1 doctor to have to do all day every day. You [also] occasionally get clients that are put off by a woman doctor.” Price also noted that she uses these challenges as encouragement to show how much she can accomplish on her own.

### Internal Medicine

**Tammy Anderson, DVM, DACVIM, veterinary internist**

NorthStar VETS, Robbinsville, NJ

Anderson got her inspiration to become a veterinarian from her mother. “She taught me a love of animals and respect for life…she said my dream was kind of what she had always wanted to do, which was shocking to me that she didn’t tell me during the many years of getting there,” Anderson said in an interview with dvm360®.

Anderson has spent many years in the veterinary field, and she shared her insight into being an internist veterinarian specifically. “If you are a veterinary internist, you must really enjoy people or else it will not be a very rewarding job. I’ve been doing this [for] a long time. It’s not only my career, [but] I [also] think it’s part of my calling,” she said.

Anderson also explained that being an internist is a lot like solving a puzzle. “I have always loved animals, but I got into internal medicine specifically because I love puzzles,” so becoming an internist veterinarian combined her 2 passions, she said.

Recognizing your own success can be difficult, but Anderson noted that hearing kind words and remarks from colleagues and friends can help remind you of those accomplishments. “I work in a wonderful place. I have my colleagues [who] I love and respect. I have had a few [individuals] who later became [a] veterinary internist say that I was one of the reasons that they did, and that makes me very proud,” she said. “I’ve worked in veterinary medicine for a couple decades now. The work is the reward itself, but I never expected to be honored, and I’m humbled.”
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After administration, with gloves on, return the dropper, aluminum pouch, and carton to the carton.

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When Flory began treating a dog named Poppy, she could not have guessed the success of her career in veterinary oncology would have shifted right before her eyes. Unfortunately, Poppy’s cancer was found too late, and there was not much Flory could do before she passed. However, her doggy, a human doctor, had a background in genomics and liquid biopsy. Together in 2019, in honor of Poppy, they joined forces to launch PetDx to create a new way to detect cancer in the blood early to help prognosis. Since its founding, PetDx’s liquid biopsy testing is proving to have potential as a valuable early detection tool.

COVER STORY
Making a difference in the veterinary profession

Andi Flory, DVM, DACVIM (Oncology), co-founder and chief medical officer
PetDx, La Jolla, CA

“I’m really excited to say that we have performed a very large clinical validation of [approximately] 1100 dogs with and without cancer to validate our test, OncoK9. [The test] means it gives us an ability to detect cancer in dogs, even prior to them starting to show clinical signs, and it’s exciting to think about what that could mean for earlier cancer detection in our patients,” Flory said. Since being notified that she is a 2022 oncology Veterinary Hero, Flory has had a permanent smile. Being nominated for this award means her work has been noticed and recognized, she noted. As she continues to work toward a way to learn more and expand her research, she is hopeful OncoK9 will help save dogs like Poppy in the future.

“What [this award] means is that there’s recognition, [and] there are ways we can make the detection of cancer better than our current paradigm, which is the detection of cancer only after a patient starts to show clinical signs. It’s just that cancer is detected so late that a lot of pets don’t really have a chance in terms of the treatment making an impact in their long-term outcome, but there is a way to make that better,” Flory said.

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30mg/mL. If the dog does not vomit within 20 minutes of the first dose, then a second dose may be administered.

Dose Administration
- Administer the appropriate number of eye drops/ topical drops according to Table 1.
- The number of eye drops administered corresponding to body weight results in a target dose of 3.75 mg/mL (dose band 2.7 - 5.4 mg/mL). If the dog does not vomit within 20 minutes of the first dose, then a second dose may be administered.
McGlasson grew up on a farm and has always had a love for animals from a young age, which only grew as he got older and learned more from his father, who was a farmer and science teacher. After accompanying his parents to the veterinarian, his interest in the field sparked and he started to volunteer at a veterinary clinic, solidifying his choice of entering the profession.

McGlasson has accomplished a lot during his career, serving as the chief medical officer for the 4 hospitals within Noah’s Ark Animal Clinics, and has a tremendous social media following to help inspire and ignite a passion in others for veterinary medicine.

“When I look back, I’m most proud of the fact that I’ve stuck with [veterinary medicine], and I’ve seen a lot of people leave the profession. I’ve been intentional about trying to grow my team and get better every year. I think of myself like a servant leader to all the [individuals] on my staff, so I wake up every morning with a feeling that I owe it to them to give my best. I’m probably the proudest that I’ve just stuck with it for this long and tried to make a positive change in the profession,” McGlasson said in an interview with dvm360.

McGlasson also expressed gratitude for those who nominated him, although he disclosed to dvm360 that the title of hero makes him feel awkward, as all he is doing is trying to make the veterinary community a better place, 1 kitten video at a time.

Acker’s work is focused on dog surgery, with a particular emphasis on orthopedics. “I do primarily orthopedics—a lot of hips, knees, [and] fractures. Specifically, I created the TATE elbow and the TATE ankle, which are elbow replacement and ankle replacement [prosthetics] for dogs,” he said in an interview with dvm360.

While in veterinary school, Acker would make dog skeletons to pay tuition, which led to him becoming more interested in orthopedics. Acker explained that he also had a dog named Tate, who inspired his creation of the TATE elbow replacement. “He was a Labrador, and he was crippled at age 7 with elbow dysplasia, which is pretty common—[seen in] 13% of dogs. I went around the world looking for an elbow replacement system and didn’t really find one, so I hired an engineer and started working on the TATE elbow,” he said.

Acker expressed his gratitude for the dvm360 Veterinary Hero recognition. “As you go longer and longer in your career—I’ve been at it for 43 years—it’s nice to have some sort of an exclamation point in recognition,” he said.

Acker added that he is grateful for all the help and collaboration he has received over the years in his career. “People were always willing to share their techniques and surgical methods with me…lots of thanks to everyone willing to share their information with me,” he said.

At age 10, Contreras would sit down in front of the television and watch Emergency Vets on Animal Planet with his late grandfather. In those moments, he knew his future would lie in veterinary medicine. Flash forward to today, and Contreras now has more than 10 years of experience under his belt, earning his veterinary assistant degree from Penn Foster College in 2009 and working persistently to become a certified canine massage therapist and dental technician.

Contreras also embodies the spirit of an innovator and entrepreneur. In 2010, he founded a canine massage therapy service, DogAppy, which he still operates part time. Six years later, he invented KlipTrio, a 3-in-1 nail-trimming tool that combines a clipper, stainless steel file, and disposable styptic powder cartridge. The tool eliminates the need to struggle with a messy bottle of styptic powder while the bleeding pet is stressed and irritated.

"By designing a product that effectively addresses and solves a problem that affects veterinary practices across the country each day, Alexandre is making a major and meaningful contribution to veterinary medicine,” one of Contreras’ nominators said.

Contreras is committed to using his entrepreneurship skills for the betterment of his community. In 2022, he created the nonprofit organization, PetTrio Charity, which aims to provide financial assistance to pet owners who are not able to afford the full cost of pet care. He is also a collaborating speaker with the Youth Veterinarian Initiative, an organization focused on educating and exposing minority youth to the field of veterinary medicine. As for advice to potential future technicians out there, “continue to evolve and educate yourself on a daily basis with every case you come across,” Contreras said. “With passion, dedication, and just relentlessness, anything is possible.”

ARGIN AUGUST 2022
Up until about the past 10 years, it was almost a given that you would graduate veterinary school and become a practice owner (assuming you were going into practice) in 5 to 10 years out of school, if not sooner. OK, in my case, it was 9 months, but that’s not something I would suggest.

Fast forward to today, and it’s done a complete 360º. The sentiment now is that no, you will not own a veterinary practice. Why not? The reasons abound; but there are some potential key factors:

• Too much student debt
• You don’t want to work that hard
• The regulatory and benefits environment is too challenging
• Too costly to open a state-of-the-art practice
• Too much competition from networks with deep pockets, making it a very risky venture
• Too hard to find support staff and other veterinarians to share the workload
• Today’s veterinarians just want to practice medicine, with little interest in business.

All this begs the question of whether practice ownership for individual veterinarians is dead or alive. My experience in working with veterinary students, Veterinary Business Management Association groups, and recent graduates tells me there is still a heartbeat. Although many new graduates are not particularly interested in being business owners, there are still many others that indicate they would like to own a practice in the future. Is this realistic, and does it make much business sense? From someone who has been involved in practice ownership and multihospital ownership for nearly 30 years, my response is that it makes total sense for the right person. Follow the 7 steps below and see how you feel about ownership after completing the process.

Who wants to be a practice owner?

Hone your veterinary skills early in your career and continue to take courses

Do you have the appropriate medical and surgical skills? Before considering ownership, these should be second nature, because as a new owner, much of your time and energy will go to running and growing your business. You cannot be stressed or slowed down by everyday medicine and surgery. It takes most practitioners 3 to 5 years to gain the experience and confidence to start multitasking as a practice leader. Ideal candidates have worked at large, busy, multidoctor practices or come from an emergency medicine background.

Do you have the temperament? Practice owners and team leaders should be even-keeled, stable, steady individuals who handle stress well. Your team, clients, and family need ownership to be a good fit for you, or chaos will become the norm. Wanting to own a practice and being the right person to own are 2 different things. Ask your family, friends, colleagues, support staff, and maybe a psychologist or clergyperson to assess whether you are suited for ownership. It’s better to know now before you get in over your head. Practice or business ownership is a blessing to many and a major stress for others.

written by
Jeff Rothstein, DVM, MBA

Rothstein is the founder and copresident of Mission Veterinary Partners, headquartered in Novi, Michigan, which operates more than 250 veterinary hospitals in more than 30 states. He is a frequent presenter at veterinary conferences and veterinary schools and can be contacted at jeff.rothstein@mvetpartners.com.
Do you have the right motive? Why do you want to do this? Is it just about the potential financial rewards and selling it off to big corporate as soon as you can? Or do you feel you can provide top-notch personalized medicine and customer care, a place that will be an employer of choice and something that will be your legacy? Like most things, if you do the right things for the right reasons, success will follow.

Do you have the right work ethic? This is not to insult anyone, but owning a small business is a major commitment and typically requires a lot of time and effort. New owners who are trying to make ends meet often wear a lot of hats and work a lot of hours. Without that devotion, practices certainly can fail. Are you willing to sign up for this?

Do you have spouse and family support? You may be willing to put in the hours needed to make the business successful and see your dreams come true, but if you have a partner and family members, are they on the same page? Does it get old if you can’t make it to some family events or can’t free up weekends for social events? It takes 2 or more to tango, so be sure everyone is on the same page; it’s not worth the stress or potentially tearing your family apart because you had to be a practice owner.

If you made it through questions 1 through 5 and still feel you are a quality candidate to be a practice owner, then you are ready to move onto what I refer to as the due diligence stage. In this stage, you begin looking for the right practice in the right place for the right price.

Finding the right practice. If you’re going down the road of ownership and taking on the risk, you want to stack the odds in your favor, giving your financial backers more confidence in supporting you.

a) A Demographics: Look for a practice that is for sale in an ideal location—yes, location makes a big difference. Picking an area ripe for growth and where you can practice high-quality medicine makes all the difference in succeeding. Maybe it’s a community you come from, where you will have an immediate following. Considering a “sleeper” practice within a mile or 2 of a large facility may not be a bad move, as you can build up your clinic, with the potential to be a merger target in the future.

b) Business plan: Be prepared to present a business plan to your financial supporters, be it a bank, family members, or others. The proper demographics, as discussed above, will be an essential part of this. The veterinary business has a great reputation, and you should be able to articulate why you are a stellar candidate to lead a practice and show why the one you want to purchase has great potential. Student debt, if you have a solid credit history, should not be a deterrent. In fact, practice ownership is likely the best way to help dig yourself out of debt if you have any lingering.

Having the right team. Using professionals who specialize in the veterinary space pays dividends. Accountants and management consultants can have a big impact on the success and profit of your business. Saving a few bucks using generalists is not worth it—and that comes from firsthand experience. What gets measured, gets managed, and these professionals can help you manage the important practice metrics such as costs of goods sold and profitability. It is true that practice ownership is not for everyone. However, looking toward the future of veterinary practice ownership, I believe opportunities will abound to team up with progressive practice groups, where in essence, you will be able to enter a variety of joint ventures or partnerships and profit-sharing opportunities with a group. These ownership models will be ideal for those who want to limit the risk of going it on their own. It can be a tremendous advantage to leverage their know-how, buying power, financing, and overall support.

If you believe ownership is in your future, follow the advice above. Hone your veterinary skills early in your career and take leadership and basic business courses, which will allow you to excel in ownership, be it on your own, with other colleagues, or with opportunities with veterinary groups.
How should you charge for your digital expertise?
Smart reimbursement strategies for adapting to telehealth

As a consultant for veterinary practices seeking to implement telehealth, I frequently hear this question: “How do I charge for something I’ve done for years at no cost?” You should be paid for your time and expertise. Here’s how you start to charge for these services, especially if you’ve trained your clients to expect them for free.

Payment method can change the entire experience for the client and how they view the service. There is such a thing as “the pain of paying,” which refers to the negative emotions experienced during the process of paying for a good or service. Research shows that cash and check payments are the most painful ways to pay but credit card payments are less painful.1 Furthermore, recent studies show that mobile and subscription payments are even less painful and often forgotten about.2 With these studies in mind, how do you make the transition from free advice to paid service as painless as possible?

START SMALL AND BUNDLE THE COST WITH OTHER SERVICES
You can easily add the cost of a virtual recheck to a surgery bill, making this one of the easiest places to start. Consider other services you can bundle, including new puppy packages with virtual nutrition and behavior consultations, palliative care, chronic condition monitoring, and rehabilitation.

USE SUBSCRIPTION PLANS
Younger clients have grown up in a world of subscriptions. It is a common way to remove the friction of paying when using a service frequently. Although your first instinct may be to worry talkative clients will take up too much time, you have many reasons to embrace this trend. Clients will reach out about symptoms sooner and will not feel they are being overcharged every time they have a question. Placing a limit on the number of consultations per month will help meter those chatty clients.

BE TRANSPARENT ABOUT COSTS
Perceived value is real. If clients think they can call you anytime, they are not going to value your time. However, if they pay to speak to you at a particular time and date, they are less likely to abuse the system. A small expense may dissuade clients who want to repeatedly communicate regarding minor issues for their pet, but it won’t limit access to care for those who need it.

CONSIDER WHO PROVIDES THE SERVICE AND WHEN IT HAPPENS, AND CHARGE ACCORDINGLY.
You may charge nothing for customer service representatives to speak with a client, a certain amount for a technician, and double that amount for a DVM. Perhaps teletriage with a technician is free, and you only charge if a DVM is needed. Maybe you only charge for cases after hours. Depending on how your practice functions, you may set up charges in multiple ways.

WHAT CAN YOU PROVIDE FOR FREE?
You may provide whatever you want at no cost. Just remember, as you continue to lose old sources of revenue to new business models such as online pharmacies, walk-in clinics in retail stores, and telehealth services from large corporations, you must learn how to survive by changing your own business and payment models. Charging for your time and expertise will eventually train your clients to better value and respect your work.

REFERENCES
WHERE PROTECTION MEETS AFFORDABILITY

Now Available at an Average Cost of

$6.62 a dose*

Complete Protection Against Heartworms,
Fleas, and Other Parasites for Cats and Dogs

COMPARE THE SIMILARITIES:

<table>
<thead>
<tr>
<th>REVOLT® (selamectin)</th>
<th>REVOLUTION® (selamectin)</th>
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<tr>
<td>Same active ingredient and dosing regimen as Revolution® (selamectin)</td>
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<tr>
<td>Same protection against heartworms, fleas and problematic parasites</td>
<td>✔</td>
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<td>Product color coding matches Revolution® for ease of product conversion</td>
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<td>Identical, weight-specific product dosing packaging</td>
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<td>Unique twist and apply minimizes application errors</td>
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<td>Best price always plus highest margin opportunity</td>
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*Based on Revolt® prices of cats and dogs up to 40 lbs.

Provide Value Without Compromising Safety or Efficacy, Prescribe Revolt® Today.
**Revolt®** (selamectin)

**Topical Parasiticide for Dogs and Cats**

**DESCRIPTION:**

Revolt® (selamectin) Topical Parasiticide is available as a colorless to yellow, ready-to-use solution in single dose tubes for topical (dermal) treatment of dogs six weeks of age and older and cats eight weeks of age and older. The content of each tube is formulated to provide a minimum of 2.7 mg/kg of body weight of selamectin. The chemical composition of selamectin is (2S,22S)-22,23-dihydro-5-hydroxyiminoavermectin A1a.

**INDICATIONS:**

Revolt is recommended for use in dogs six weeks of age or older and cats eight weeks of age and older for the following parasitic and indications:

**Dogs:**

- Revolt kills adult fleas and prevents flea eggs from hatching for one month and is indicated for the prevention and control of flea infestations (Ctenocephalides felis), prevention of heartworm disease caused by *Dirofilaria immitis*, and the treatment and control of ear mite (*Otodectes cynotis*) infestations. Revolt also is indicated for the treatment and control of roundworm (*Toxocara canis*) and intestinal hookworms (*Ancylostoma tubulurem*) infestations in cats.

**Cats:**

- Revolt kills adult fleas and prevents flea eggs from hatching for one month and is indicated for the prevention and control of flea infestations (Ctenocephalides felis), prevention of heartworm disease caused by *Dirofilaria immitis*, and the treatment and control of ear mite (*Otodectes cynotis*) infestations. Revolt is also indicated for the treatment and control of roundworm (*Toxocara canis*) and intestinal hookworms (*Ancylostoma tubulurem*) infestations in cats.

**WARNINGS:**

Not for human use. Keep out of the reach of children.

In humans, Revolt may be irritating to skin and eyes.

Reactions such as hives, itching and skin redness may be reported in humans in rare instances. Individuals with known hypersensitivity to Revolt should use the product with caution or consult a health care professional. Revolt contains isopropyl alcohol and the preservative butylated hydroxytoluene (BHT). Wash hands after use and wash off any product in contact with the skin immediately with soap and water. If contact with eyes occurs, then flush eyes copiously with water. In case of ingestion by a human, contact a physician immediately.

The safety data sheet (SDS) provides more detailed occupational safety information. To report suspected adverse drug events, for technical assistance or to obtain a copy of the SDS, contact Aurora Pharmaceutical, Inc. at 1-888-211-1256 or www.aurorapharmaceutical.com. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or online at www.fda.gov/reportemt.

Flammable - Keep away from heat, sparks, open flames or other sources of ignition.

Do not use in sick, debilitated or underweight animals (see SAFETY).

**PRECAUTIONS:**

Prior to administration of Revolt, dogs should be tested for existing heartworm infestations. At the discretion of the veterinarian, infected dogs should be treated to remove adult heartworms. Revolt is not effective against adult *Ancylostoma* and, while the number of circulating microfilariae may decrease following treatment, Revolt is not effective for microfilarial clearance.

Hypersensitivity reactions have not been observed in dogs with previous heartworm infections administered three times the recommended dose of selamectin. Higher doses were not tested.

**ADVERSE REACTIONS:**

**Pre-approval clinical trials:**

Following treatment with selamectin, transient localized alopecia with or without inflammation at or near the site of application was observed in approximately 1% of 691 treated cats. Other signs observed rarely (≤0.5% of 1743 treated cats and dogs) included moistening, loose stool or diarrhea with or without blood, anorexia, lethargy, salivation, tachypnea, and muscle tremors.

**Post approval clinical trials:**

In addition to the aforementioned clinical signs that were reported in pre-approval clinical trials, there have been reports of pruritus, urticaria, erythema, ataxia, fever, and rare reports of death. There have also been rare reports of seizures in dogs (see WARNINGS).

**DOSEAGE:**

The recommended dosage is 2.7 mg selamectin per pound (6 mg/kg) of body weight.

Administer the entire contents of a single dose tube for two tubes used in combination for dogs weighing over 130 pounds of Revolt topically in accordance with the following tables. (See ADMINISTRATION for the recommended treatment intervals.)

**Cats (lb)**

<table>
<thead>
<tr>
<th>Cats (lb)</th>
<th>Package Color</th>
<th>mg per tube</th>
<th>Potency (mg/mL)</th>
<th>Administered volume (mL)</th>
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</thead>
<tbody>
<tr>
<td>Up to 5</td>
<td>Rose</td>
<td>15 mg</td>
<td>60</td>
<td>0.25</td>
</tr>
<tr>
<td>5.1-15</td>
<td>Blue</td>
<td>45 mg</td>
<td>60</td>
<td>0.75</td>
</tr>
<tr>
<td>15.1-22</td>
<td>Taupe</td>
<td>60 mg</td>
<td>60</td>
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For cats over 22 lbs use the appropriate combination of tubes.

**Dogs (lb)**

<table>
<thead>
<tr>
<th>Dogs (lb)</th>
<th>Package Color</th>
<th>mg per tube</th>
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<tbody>
<tr>
<td>Up to 5</td>
<td>Rose</td>
<td>15 mg</td>
<td>60</td>
<td>0.25</td>
</tr>
<tr>
<td>5.1-10</td>
<td>Purple</td>
<td>30 mg</td>
<td>120</td>
<td>0.25</td>
</tr>
<tr>
<td>10.1-20</td>
<td>Brown</td>
<td>60 mg</td>
<td>120</td>
<td>0.5</td>
</tr>
<tr>
<td>20.1-40</td>
<td>Maroon</td>
<td>120 mg</td>
<td>120</td>
<td>1.0</td>
</tr>
<tr>
<td>40.1-85</td>
<td>Teal</td>
<td>240 mg</td>
<td>120</td>
<td>2.0</td>
</tr>
<tr>
<td>85.1-110</td>
<td>Plum</td>
<td>360 mg</td>
<td>120</td>
<td>3.0</td>
</tr>
</tbody>
</table>

For dogs over 130 lbs use the appropriate combination of tubes.

Recommended for use in dogs 6 weeks of age and older and in cats 8 weeks of age and older.

**ADMINISTRATION:**

A veterinarian or veterinary technician should demonstrate or instruct the pet owner regarding the appropriate technique for applying Revolt topically to dogs and cats prior to first use.

While holding the tube at an upward position, twist the cap to break the seal. The cap will remain on the tube. To administer the product, part the hair on the back of the animal at the base of the neck in front of the shoulder blades until the skin is visible. Place the tip of the tube on the skin and squeeze the tube 3-4 times to empty its entire contents directly onto the skin in one spot. Keeping the tube cap opened, drive it away from the liquid and lift to remove. Check the tube to ensure that it is empty.

Do not massage the product into the skin. Due to alcohol content, do not apply to broken skin. Avoid contact between the product and frogs. Do not apply Revolt topically to wet or bathing dogs or cats. If Revolt is applied to wet or bathing dogs or cats, it will reduce the effectiveness of Revolt against flea and heartworm. Bathing or shampooing the cat 2 hours after treatment will not reduce the effectiveness of Revolt against flea and heartworm.

**Fea Control in Dogs and Cats**

For the prevention and control of flea infestations, Revolt should be administered at monthly intervals throughout the flea season, starting one month before fleas become active. In controlled laboratory studies, 98% of fleas were killed within 36 hours. Results of clinical field studies using selamectin monthly demonstrated ≥90% control of flea infestations within 30 days of the first dose. Dogs and cats treated with selamectin, including those with existing flea allergy dermatitis, showed improvement in clinical signs associated with fleas as a direct result of eliminating the fleas from the animals and the environment.

If the dog or cat is already infested with fleas when the first dose of Revolt is administered, adult fleas on the animal are killed and no viable flea eggs hatch from eggs after the first administration. However, an environmental infestation of flea eggs may persist for a short time after beginning treatment with Revolt because of adult flea persistence from previous infestations.

**Heartworm Prevention in Dogs and Cats**

For the prevention of heartworm disease, Revolt must be administered on a monthly basis. Revolt may be administered year-round or at least once within one month after the animal’s first exposure to mosquitoes and monthly thereafter until the end of the mosquito season. The final dose must be given within one month after the last exposure to mosquitoes. If a dose is missed and a monthly interval between dosing is exceeded then immediate administration of Revolt and recollection of monthly dosing will minimize the opportunity for the development of adult heartworms. When replacing another heartworm preventive product in a heartworm disease prevention program, the first dose of Revolt must be given within a month of the last dose of the former medication.

Selamectin, the active ingredient in Revolt, is a macrocyclic lactone compound. These compounds effectively prevent the development of microfilariae (L3) by paralyzing and killing L3. If microfilariae are not already present in the animal, no adverse reactions were observed.

**Tick Control in Dogs**

For the control of tick (Dermacentor variabilis) infestations in dogs, Revolt should be administered on a monthly basis. In heavy tick infestations, complete efficacy may not be achieved after the first dose. In these cases, one additional dose may be administered two weeks after the previous dose, with monthly dosing continued thereafter.

**Nematode Treatment in Cats**

For the treatment and control of internal hookworms (A. tubulurem) and roundworms (T. cati) infections, Revolt should be applied once as a single topical dose.

**SAFETY:**

Selamectin has been tested safe in >100 different pure and mixed breeds of dogs and over 15 different pure and mixed breeds of cats. A wide range of dosages (from <5 mg/kg to >10 mg/kg) was applied topically to cats and dogs with normal, intact skin. Adverse reactions were not observed.

**DOGS:**

In safety studies, selamectin was administered at 1X, 3X, and 10X the recommended dose to six-week-old puppies, and no adverse reactions were observed. The safety of selamectin administered orally also was tested in case of accidental oral ingestion. Oral administration of selamectin at the recommended topical dose is >5- to 8-month-old beagles did not cause any adverse reactions. In a preclinical study in cats dosed orally was well-tolerated and was without adverse effects (see WARNINGS).

**Cats:**

In safety studies, selamectin was administered at 1X, 3X, and 10X the recommended dose to six-week-old kittens, and no adverse reactions were observed. The safety of selamectin administered orally also was tested in case of accidental oral ingestion. Oral administration of selamectin at the recommended topical dose is >5- to 8-month-old kittens did not cause any adverse reactions. In a preclinical study in cats dosed orally was well-tolerated and was without adverse effects (see WARNINGS).

**STORAGE CONDITIONS:**

Store below 10°C (50°F).

**HOW SUPPLIED:**

Available in eight separate dose strengths for dogs and cats of different weights (see DOSAGE). For Revolt puppies and kittens available in bottles containing 1 single dose tube. Revolt for dogs and cats is available in bottles containing 3 or 6 single dose tubes.

**Manufactured By:**

Aurora Pharmaceutical, Inc.
Northfield, MN 55057
www.aurorapharmaceutical.com
Manufactured in U.S.A.
How to recover from a bad online review

Using online reviews as an opportunity to demonstrate your clinic’s commitment to excellence

The old saying, “You can’t please all the people all the time,” is true. Even the best clinic can experience a dissatisfied client who leaves a bad online review. It can trigger a surprisingly emotional response and cause a lot of stress, but there are measures we can take to handle the situation constructively.

**BE PROACTIVE**

Protect your clinic against negative reviews by making sure you claim all online business listings from sites such as Google, Facebook, or Yelp. They can collect reviews about your business, even if the listing hasn’t been claimed, but you want to be notified when a review comes in to respond promptly. Proactively collect feedback—good or bad—before clients take it online. Staff can ask for verbal feedback at the conclusion to a consult or transaction. A suggestion box, follow-up email, or automated performance management systems process can make it easy for clients to give feedback.

Design a protocol for dealing with online reviews. Negative reviews tend to fall into a few categories: an emotional outburst after a difficult experience, such as euthanasia; a low rating from someone who isn’t one of your clients; or commonly, complaints about the bill. Make sure staff know how to deal with these types of complaints and when to refer to a manager.

**BE POSITIVE AND RESPONSIVE**

A timely response shows your clients you are attentive and care what they think, but make sure to keep calm. Don’t take the criticism personally, get defensive, or go on the attack. Keep it professional, check your tone, and look for ways to resolve the issue. Approach it empathetically and thank them for sharing their concerns. Remember that your reply is just as much to others reading your response as to the person who has complained.

Politey identify nonclients whose records you don’t have in your system and ask them to get in touch directly. Invite clients to discuss the issue with you offline, where you can have a deeper conversation about their experience and discuss solutions. Avoid justifying your response with a lot of details. Be willing to take responsibility, and always frame your response toward finding a constructive resolution.

**VIEW IT AS AN OPPORTUNITY**

Although negative reviews can be damaging to your business, they also give you the opportunity to demonstrate your commitment to your clients’ experience. A Harvard Business School study found that what customers really want is a simple, quick solution to their problem. A key strategy for gaining customer loyalty is to elicit and use feedback from disgruntled or struggling customers and focus on problem solving. By leaving the review, your client is giving you the chance to resolve the issue, and an unhappy client who has experienced an effective resolution may gain more trust and loyalty for your clinic than someone who has never had a problem. It also gives others the chance to gain confidence in your service if they can see you have successfully resolved a problem.

**MOVING FORWARD**

Make sure your process for complaints also covers negative online reviews, and that there is support for staff involved. Consider a planned public relations strategy to manage the tone of your communications, share positive stories, gain the support of local media, and cultivate a positive online presence for your clinic. Remember that no one is perfect, but feedback from clients allows us to engage and learn and provides the opportunity to improve our practice.

**REFERENCE**

Questions and answers about ransomware

Take steps to protect against or recover from an attack

Unless you’ve been living under a rock or on a remote island, you know that ransomware has become part of everyday life on this planet. Not a day goes by that there isn’t news of some major company or organization that has been a victim of an attack. With so much discussion about ransomware, we should take a step back to understand what it is and why it matters.

WHAT EXACTLY IS RANSOMWARE?

Ransomware is pretty much what the name implies. It is a class of malware (viruses) that, once it attacks your computers, can lock your critical files and demand that a ransom be paid to receive the unlock key. The ransom can range from a few thousand dollars to many millions of dollars; it’s often related to the size of the business being attacked and its ability to pay the ransom. If the files are locked, you are prevented from accessing any of them without a decryption key.

HOW DOES MY SYSTEM GET INFECTED WITH RANSOMWARE?

There are many ways your system can be infected. The most common is when you or a staff member clicks on an email that contains the ransomware virus. The email can be a link or an attachment. Some malicious websites have ransomware that can infect your systems just by visiting the site. Many other viruses can spread because of vulnerabilities in the Windows operating system.

IS RANSOMWARE A BIG DEAL?

In a word, yes! Forget for a moment that having your files locked would disrupt your day (or days) completely. If you are hit with a ransomware virus, you must declare a breach, according to a memo from the Office for Civil Rights on July 12, 2016. The Breach Notification Rule is quite clear: You must notify all your patients in writing, notify the local news media, and have your practice listed on the Department of Health and Human Services Wall of Shame website. It would be devastating for any practice to have to do this.

CAN I PROTECT MYSELF AGAINST RANSOMWARE?

Absolutely. Good antimalware software is a must, but I also suggest investing in ransomware-specific products such as Intercept X (Sophos) or HitmanPro (Sophos). A newer technology, application whitelisting, prevents any unapproved software from running. You should have your systems updated on a regular basis; this is called patch management and is required by the Health Insurance Portability and Accountability Act (HIPAA). You also need to take time to educate yourself and your staff to recognize malicious emails and websites and learn what to avoid.

SHOULD I PAY THE RANSOM IF MY SYSTEM GETS INFECTED?

This is a tough question to answer. The offices we support all have encrypted backups, and in most cases, we can restore from a backup. Of course, steps would need to be taken to remove the virus from your network before doing this.

If you don’t have a good backup, your options are more limited. In many instances, paying the ransom will get you the unlock key. The criminals who do this realize that if they didn’t provide the keys, people would eventually stop paying. However, we have seen a few cases where the money was paid and no key was provided, or if it was, it didn’t work to restore all the files.

Also be aware that you can’t send these people a check or pay with a credit card. They will require that you use a digital currency, such as Bitcoin, which is anonymous and difficult to trace back to an individual owner.

WHAT SHOULD I DO AT THIS POINT?

Review your security systems in place. HIPAA demands that you do a formal risk assessment and develop a management plan, and there’s no time like the present to start. Evaluate your firewalls, antimalware software, backups, and disaster recovery systems in place, as well as your system for patching your software. Protect yourself now before it’s too late!
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To learn more, contact your Merck Animal Health sales representative or your distributor representative.

Customer Service: 1-800-521-5767
(Monday–Friday, 9:00AM–6:00PM EST)

Technical Services: 1-800-224-5318
(Monday–Friday, 8:30AM–7:00PM EST)


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From infectious to parasitic: a discussion of canine and feline preventive care in 2022

Four experts sat down with Adam Christman, DVM, MBA, for a panel discussion on the current state of vaccinations and client education.

Written by Bob Alaburda, Senior Editor

What vaccinations should veterinary professionals be administering and how can they best tackle patient concerns and hesitancy?

Led by dvm360®’s Adam Christman, DVM, MBA, three clinicians and a professional dog breeder with a diverse range of experience and backgrounds convened for a panel discussion to address that question whose answer is always evolving. The group discussed their current approach to vaccine protocols for various diseases, including canine respiratory disease, leptospirosis, rabies, and more.

**CANINE INFECTIOUS RESPIRATORY DISEASE COMPLEX (CIRDC)**

Commonly referred to as kennel cough, CIRDC can be caused by one or a combination of several pathogens. The panel discussed a well-known threat in *Bordetella bronchiseptica*, as well as the more-recently emerging spread of parainfluenza and canine adenovirus.

“We know that the coughing dog, especially the upper respiratory infection in a dog, is not usually single pathogen,” said Jenifer Chatfield, DVM, DACZM, DACVPM. “It’s a multipathogenic infection, so while culture may reward the bacteria that outgrows everybody else and point the finger at that single pathogen, I think typically what we’re looking at is kind of a mixed bag.”

Chatfield later added, “[That’s why] almost every [canine] patient I see gets an upper respiratory vaccination, but I don’t vaccinate only for Bordetella. I prefer to use the intranasal vaccine, because it has 3 components to it. It’s not just vaccinating for Bordetella because in my experience Bordetella is very rarely the problem...We know parainfluenza is kind of the glue that holds the infectious disease complex together in dogs, and so I like to vaccinate for parainfluenza. I like to vaccinate for Bordetella and also canine adenovirus, and that’s all contained in that intranasal vaccination.”

Yasmine Mortsakis, DVM, shared her experience in Manhattan and the lifestyle of city dogs that live in high-population-density areas: “Some [dogs] go to daycare; maybe some don’t; maybe some go to the park; some don’t. [However] for the dogs that come into the facility, often we’re still recommending every 6 months for that intranasal Bordetella [vaccine] because the efficacy does wane at 8 months, and we’re talking about a high-risk population.”

Mortsakis continued, “I think you need to vaccinate against as much as you can...We want these dogs to be playing and having a healthy time.”

Chatfield remarked, “Well, there’s so many things we can’t vaccinate against, right? So, let’s do what we can do...[Let’s] treat for the treatable.”

In her experience as a breeder of Siberian huskies with Ninkasi Siberians, Laura Anderson commented on the protocols for her particular situation: “Part of it is also environmental control at my house, because I have senior dogs that are running 14 to 15 years old. Because I’m taking these dogs out to shows and environments where there’s a lot of dogs, I actually have sections of my home, [that are] isolated [and] on completely different ventilation...to prevent exposures to the senior dog.”

On vaccine schedules, Anderson takes great responsibility in making sure her dogs are vaccinated before a show to ensure the efficacy is at its highest when risk is at its highest. “If I’m doing something once a year, that’s not going to be enough if my high-risk show ends up being 11 months down the road,” Anderson said.

“We actually had a very bad outbreak in Manhattan and a lot of dogs were affected. There were dogs that ended up with pneumonia, [and some even passed away],” said Mortsakis. She continued, “If you’re waiting until an outbreak happens, it’s too late to be vaccinating...”

Primm put a bow on the discussion, commenting, “Vaccination is safe and inexpensive on the scale of things. If you’ve had to treat a pneumonia, it’s certainly less expensive than that. So why not, right?”

**LEPTOSPIROSIS: A ZOONOTIC THREAT FOUND JUST ABOUT EVERYWHERE**

Leptospirosis is a bacterial disease found worldwide in soil and water. Chatfield said, “If anyone ever asks [if you have leptio in your area], your answer is, ‘Yes we do, at all times.”

According to Chatfield, the threat of leptospirosis is on the rise: “In the United States, it’s considered a reemerging pathogen, because we’re starting to see a trend and an uptick of cases in humans and in pets.”
Primm said she capitalizes on the fact that leptospirosis is zoonotic in order to motivate clients to accept the vaccine for their pets. She said, “When I go into the exam rooms to talk with pet owners, I always mention, ‘I want to vaccinate your dog for this…and the fact that I want to protect you and your family too…your dog is definitely drinking out of puddles, and your yard has squirrels. And in Tennessee, your yard has possums and raccoons, too.’”

Mortsakis added that in addition to increasing rat and dog populations in urban environments, there has been less of a push for leptospirosis vaccines because of the misconception that an infection requires a substantial amount of water. She commented, “We think about puddles of water and things like that, but it doesn’t have to be some ginormous puddle of water. It could be little bit of water on the street and a dog sniffs that. It’s mucous membranes, right? So, it’s not just that they’re drinking it. It can go in through the nose. [Infection can also occur if] there’s a little cut on the bottom of the paw and they just happen to walk through a little bit of urine. And again, there are asymptomatic dogs that are shedding it, as well.”

Primm commented on the improvement of the leptospirosis vaccines over the years and the concerns of anaphylactic reactions: “In the olden days, when I first graduated from veterinary school, leptov vaccines were not as good. I remember seeing a lot of puffed-up faces, and it sort of stood out to me as a baby vet…Now the vaccines are just so much better, and I think it’s because of things like VacCure®, because it filters out some of the proteins and some of the things that are stimulating bad [reactions]. I want to knock on wood, but I haven’t seen a vaccine reaction in a really long time from any of my vaccines, because I use all the really pure ones and the best that’s available.”

When Chatfield mentioned the 40% mortality rate of the hepatic version of leptospirosis, Primm asked rhetorically, “That’s my question: Why wouldn’t you vaccinate for it?”

“I didn’t realize there was a hepatic version of lepto,” said Anderson. “If you have a 40% mortality rate…that’s really, really scary stuff.”

Anderson concluded, “I’ve never heard of a dog dying from a lepto vaccine, but I have heard of dogs dying of lepto.”

**VACCINATING THE “INDOOR ONLY” CAT**

The group wrapped up the discussion with a focus on feline-specific issues. They addressed the fact that because many pet parents view their cats as indoor pets, convincing them to get the appropriate preventive care can be a challenge.

Chatfield shared the conversation she has with pet parents on getting their cat vaccinated for rabies: “We vaccinate for the rabies exposure we don’t know about…If you don’t know that the one time they got out they encountered a raccoon that was rabid, you don’t know to boost it, right? [That’s why] it’s better to have them routinely vaccinated.”

Mortsakis added that her strategy when speaking with cat-parent clients who also own dogs is to tell them: “Your cat really isn’t indoor solely, because your dog’s not indoor solely.” She said that this tact can help clients see the need for heartworm and flea and tick prevention.

On flea prevention, the group discussed the benefits of using a longer-acting medication. They agreed that between topical and chewable forms, it helps to have options to individualize the treatment to the cat and owner’s needs and preferences.

Chatfield said, “Putting anything topical on a cat that wasn’t their idea, and it will never be their idea…it’s better if I only have to do that every 3 months or so. She added, ‘People can’t imagine doing it once a month and I [tell them], ‘Oh, no, it’s not that often. It’s just, 4 times a year.’ That sounds better.”

**STRATEGIES FOR COMPLIANCE**

On flea preventive treatments, both Chatfield and Mortsakis both recommended using a product that lasts 3 months vs 1, saying it’s easier for clients to follow a schedule with fewer doses. Chatfield added, “The data shows that even if you give shorter-acting ones on the exact same day at the exact right time, and you calculate it out, you still see that dip in efficacy. And so I just give [the longer-acting medication] and don’t worry about it.”

Anderson outlined her client education strategy around vaccines and preventives: “Every person who gets a puppy from me has to listen to my speech about healthcare, and they go home with a document that outlines [the treatment plan]. They don’t just read it; they listen to me talk through it.”

Mortsakis added: “It’s a lot of information that we’re giving them all at once and their heads sort of start spinning off. What we found was really helpful is we send a follow up email to them, and it actually tailors the vaccine schedule for [their pet]. Then there’s a little blurb about, just in case they forgot, about what each vaccine is for, why it’s important, and what the exposure risks are…We’ve seen that’s helped a lot with compliance and understanding what we’re talking about, because they do leave sort of overwhelmed and kind of deer-in-headlights.”

Primm shared: “I love client education, and I like to do handouts and train my team. I wrote some client education handouts for dvm360®, and one of them was: “Why do many pets need vaccines?” It’s a single-page handout, and we include that in our puppy package.”

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Laura Anderson

“I’ve never heard of a dog dying from a lepto vaccine, but I have heard of dogs dying of lepto.”

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Laura Anderson
My colleague’s swamped clinic is struggling to answer phones and triage cases. Their ability to offer same-day appointments is a thing of the past. Sound familiar? It seems like clinic phones have been ringing constantly for the past 2 years, with no end in sight. This overwhelming situation affects the entire team in the following ways:

- Customer service representatives (CSRs) stuck on the phone, triaging cases they may not have the experience to manage correctly
- Doctors handling questions from CSRs in between (and during) appointments
- Technicians being interrupted with questions and answering phones when CSRs are tied up, limiting their ability to efficiently assist the veterinarian

And don’t forget about those we’re trying to help in the first place. Clients are frustrated when they can’t get an answer right away and must wait hours or sometimes days to get a response from a professional. They turn to Google, breeders, friends, family, or the pet shop salesperson for answers. Although these may be useful sources for pet information, they do not necessarily offer our valued clients the best advice when it comes to pet health.

WHAT HAPPENS WHEN WE CAN’T GIVE CLIENTS INSTANT GRATIFICATION?

What if you can’t see a client the same day they call with a question or perceived emergency? Chances are, they will spend the next hour or more calling other local clinics, trying to find an appointment. They may sit at home and stress about their pet until their appointment 5 days later, which you arranged. Perhaps they will head to the local emergency clinic where wait times are long and where they may be turned away if the condition isn’t life-threatening. Is there an alternative where everyone benefits?

What do clients want when they call a veterinary clinic?

Clients want convenience that’s driven by technology. They prefer options that can be accessed for a reasonable fee from the convenience of their smartphone or other device. Clients choose and remain loyal to veterinary practices that provide these conveniences and excel in speedy response times. They’re also willing to pay more for these types of services.
Consider how popular Booking.com is for reserving travel accommodations, Amazon is for shopping, and YouTube is for entertainment and information. Unsurprisingly, the veterinary space is following suit. Think about the advancements and changes that have already been developed in the areas of veterinary prescription delivery, one-stop online shops for pet supplies, and home diagnostic offerings.

Veterinary telehealth may be the missing piece in this puzzle. With ongoing staffing struggles and increasing wait times for patients, brick-and-mortar hospitals may see their clients look for virtual veterinary advice on their own. Why not refer them to a preferred telehealth provider that will be a teammate in their continuity of care? They will keep your clients happy and your patients healthy.

WHAT HAPPENS WHEN YOU REFER A CLIENT TO A TELEHEALTH PROVIDER?

Four fantastic things happen when you team up with a veterinary telehealth provider:

- You can offer a same-day (and often a same-hour) appointment with the telehealth service of your choice.
- The client does not become upset when they can’t get a same-day appointment and is more willing to accept your next available opening.
- The patient receives the best possible care, with no assistance from Google prior to their appointment.
- Your practice keeps the client and patient instead of losing them to other clinics.

Here’s how it works

Many of the health concerns in client calls may be evaluated via telehealth: skin conditions, gastrointestinal issues, ear infections, injuries, etc.

Let’s look at one scenario:

A long-time client calls your clinic, concerned about their 2-year-old Labrador retriever’s itchy skin. Your CSR notes that the next available appointment is in 5 days. The client expresses concern for the dog’s comfort and wants to know what can be done in the meantime to keep the pup happy. They book the next available appointment with your practice, and in the meantime, the client receives a link to connect with your preferred telehealth provider. The CSR explains that the online vet can evaluate the dog and offer safe home care recommendations to use while they wait for their appointment with you. The client is comforted by this information and your willingness to provide immediate care for their beloved pet.

The owner connects with an online vet as recommended. This vet evaluates the dog’s skin, ensures the dog’s condition isn’t emergent, and gives the owner practical and safe advice to keep the dog comfortable at home and prevent worsening of the condition. This includes sending them to your practice to purchase shampoo, flea prevention medication, and an e-collar. The owner also learns about possible causes of the itchy skin and common diagnostics that may be given during the dog’s upcoming appointment. The client and your practice receive the pet’s medical record from the telehealth visit via email, ensuring everyone is on the same page when the dog comes in for the appointment 5 days later.

In this scenario, the CSR was able to keep the phone call under 2 minutes, without giving inappropriate medical advice. No call back was necessary from a doctor or technician. Most importantly, the dog was well cared for, and the client was thrilled with the personalized attention. They were well prepared for their appointment, allowing you to give a diagnosis and treatment plan efficiently and successfully.

THE BENEFITS OF TELEHEALTH

The bustling summer season is the perfect time to relieve some of your staff’s stress while still providing exceptional and accessible care for your clients and patients. Teaming with a telehealth provider can streamline your hospital’s workflow and make everyone less overwhelmed. Your clients will be pleased by the option to speak to an experienced veterinarian whenever they call, and they’ll be well equipped to make educated decisions about their pet’s health care when they come in for their appointment.
Nearly half of pet parents in the United States underestimate the lifetime cost of care for their 4-legged companions. That means millions of households are financially unprepared for the true cost of pet ownership. How can veterinary professionals help bridge that knowledge gap to reduce the stress of unexpected expenses on clients and ensure patients receive the care they deserve?

In the latest dvm360® Vet Perspective video series, Adam Christman, DVM, MBA, and Peter Weinstein, DVM, MBA, discussed the results and significance of the Lifetime of Care study.

COST OF TREATMENT ANXIETY

The Lifetime of Care study was conducted on behalf of Synchrony, the organization behind CareCredit and Pets Best pet health insurance. It is based on findings from a nationwide survey of 1,200 pet owners and 100 veterinarians in the United States on spending that includes spaying/neutering, vaccinations, supplies, food, and insurance. The survey found that dog owners spend as much as $55,132 during a pet’s lifetime and cat owners as much as $45,790.

Perhaps the most significant finding with respect to the veterinarian-client relationship was the fact that in 3 pet-owning households will face an unexpected pet expense that will cause them financial worry. Furthermore, the study found that certain price thresholds caused stress in many clients. Weinstein explained: “When we’re talking to [pet owners] about a treatment plan...if 25% of the people surveyed saw a cost of $250, they would have anxiety [about their ability to pay] because it was outside what they expected in terms of cost of care. An even more significant number to me is 46% [had anxiety] at $500, which means [half] of people you’re talking to...will have a little uncertainty about their ability to pay for their pet’s care at a $500 level.”

WHY IT MATTERS: THE ROLE OF VETERINARY PROFESSIONALS

Recognizing the problem—client underestimation of pet care costs and the stress caused by unexpected expenditures—is only the first step. If pet owners cannot afford care or opt out of treatments because they cannot accept the price tag, pets will lack optimal care and practices will have less business. Veterinary professionals and staff are uniquely positioned to educate clients about the lifetime cost of care for pets and the tools to cope with expenses, helping ensure those pets get the appropriate care. Moreover, pet owners want their vet to speak directly to them about the cost of care over their pet’s lifetime, including payment options.

Weinstein explained the importance of the veterinary team doing their homework on the various forms of third-party financial assistance, such as the CareCredit credit card and pet health insurance. “As a veterinarian, it is my responsibility to help vet…those companies and find out which ones are best for my clients. I should be advocating for different pet health insurance companies. When I was in practice, we insured my staff members’ pets, which gave [my staff] a full understanding of how pet health insurance worked so they could advocate it with...clients.” He added that he has used multiple forms of pet insurance in his life as a pet owner to be better equipped for those conversations with clients.

How should the team have those conversations with clients? Weinstein believes they shouldn’t start in the exam room. Rather, they should begin before the first appointment. He said information on financial policies and plans can be communicated to a new client in a series of emails, on the clinic’s website, over the phone, or virtually. “In a veterinary hospital, your clients are only going to absorb about 20% of what you say,” said Weinstein.

HOW TO GET STARTED

Weinstein provided a step-by-step guide on how to implement his advice. “Step 1: Send [clients] some information ahead of time. Step 2: At the end of the visit or before they go into the room, ask whether they’d like some additional information about CareCredit or pet health insurance. Step 3: Before they leave, ask whether they would like the team to follow up.” He continued, “I think...great questions on a new client form would be ‘Is your pet insured? With which company? Do you have CareCredit?’ And then finally, ‘Would you like more information about CareCredit or pet health insurance to help with cost of care for your pet?’” With these tips, practices would be well on their way to providing clients with financial peace of mind, Weinstein said.

REFERENCES
1. Pet—Lifetime of Care Study; August 2021. www.petlifetimeofcare.com

Pet insurance is administered by Pets Best Insurance Services, LLC and is underwritten by American Pet Insurance Company, a New York insurance company headquartered at 6300 4th Ave. S. Suite 200 Seattle, WA 98108. Please see www.americanpetinsurance.com to review all available pet health insurance products underwritten by AMPC.

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—Peter Weinstein, DVM, MBA
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Pet - Lifetime of Care Study, August 2021 www.petlifetimeofcare.com
Preparing veterinary hospitals for greatness through DEI initiatives

Shandell Maxwell, PhD, shares her experience as a Black individual in the veterinary industry

Shandell Maxwell, PhD, didn’t grow up in a family that took pets to the vet. “If Cuddles got sick, Cuddles ‘ran away’ because we weren’t taking Cuddles to an animal hospital. And although my middle-class parents could afford care back in the ‘80s, it wasn’t a norm in the Black community to take animals to the vet,” she reminisced.

Growing up as a Black female, Maxwell described how the veterinary industry didn’t seem to be for people like her. It’s not surprising, seeing as the Bureau of Labor Statistics reported that as of 2019, close to 90% of veterinarians are White, making it one of the least diverse health care professions.1 Maxwell described her experience working in the veterinary industry and how she was often the only Black person in the room. “Working in the industry and feeling the pressure to change the perception of others who may have never worked with a Black person was a tough responsibility,” she said. She went on to explain how history has painted Black people as being lazy workers and better suited for serving than leading and how she hoped her work ethic would change the perception of those who carried that belief.

“The industry should reflect the communities it serves,” she said, noting the diversity disparity within vet staffing, Maxwell has been promoting the need for diversity, equity, and inclusion (DEI) since 2013. However, it was during the pandemic and after nearly 25 years of working in and out of the veterinary industry that she launched her own business, Byrd and Maxwell Coaching Institute, and took her passion to the next level. She now provides coaching and educational services that help professionals level up, especially as it relates to understanding DEI in the veterinary industry—which may one day include her daughter, who dreams of becoming a veterinarian.

Maxwell is passionate about expanding DEI practices in the veterinary industry—which may one day include her daughter, who dreams of becoming a veterinarian. Maxwell envisions a space where “differences are recognized and respected, unique skills and talents are utilized appropriately, and leadership understands their team’s capability and invests in creating an environment where everyone feels seen and supported.”

References available online at dvm360.com

Written by
Kaci Sintek

Sintek grew up raising livestock, which ignited a deep love of animals. She now works as a marketing, communications, and public relations professional out of Denver, Colorado.

Interview by
Shandell Maxwell, PhD

Maxwell is a diversity, equity, and inclusion coach and speaker in the veterinary field. Her company, Byrd and Maxwell Coaching Institute, seeks to prepare people for greatness through professional and personal life coaching.

Resources recommended by Maxwell

• UNBIAS: Addressing Unconscious Bias at Work by Stacey A. Gordon
• Diversity Beyond Lip Service by La’wana Harris
• Navigating Diversity and Inclusion in Veterinary Medicine by Lisa M. Greenhill, Kauline Cipriani Davis, and Patricia M. Lowrie, and Sandra F. Amass
• American Veterinary Medical Association’s diversity, equity, and inclusion resources and tools
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Fetch faculty **After Hours™**

A few of our conference speakers shared what they do outside their veterinary practices.

**VETERINARIAN ON ICE**

Kvitko-White, founder and president of Missouri-based KW Veterinary Consulting, sat down with dvm360® to discuss her life as a “rink rat.” Growing up with a love of skating, Kvitko-White carried that passion with her into her adult life. In addition to skating, she also began playing ice hockey with fellow veterinary classmates. These days, she continues to enjoy skating, and play ice hockey, with the hope that her love for the ice will rub off on her children.

**THE STREET VET**

Stewart—now star of “The Street Vet” television show—noticed a person experiencing homelessness with his pet, as the California resident entered a convenience store. He asked if he could examine the pet, which appeared to be suffering from a bad flea infestation. After treating the animal, Stewart decided he was going to give back to his community by providing free veterinary care for the homeless. Now, more than 5 years later, Stewart has launched Project Street Vet and continues to help those in need.

**VETERINARIAN’S DOZEN**

In Hong Kong, during the COVID-19 pandemic, Zager, a veterinary criticalist for Philadelphia Animal Specialty and Emergency hospital in Pennsylvania, discovered a love of baking while stuck indoors and looking for something to do. Now when he’s trying out new recipes, he uses his baking to bring his team together one tasty treat at a time. Stay tuned for this episode!

**RAISING CHICKENS**

Halow was inspired by a late relative to follow his dream for raising chickens. Halow built a coop in a single day, using materials already on hand at his farm. In this interview, he discusses his enjoyment of having these chickens live in his barn, and the calming effect they have on him.

From the kitchen to the farm to the ice rink to the streets, Fetch faculty Heather Kvitko-White, DVM, DACVIM; Kwane Stewart, DVM; Erik Zager, DVM, DACVECC, and Bash Halow, LVT, CVPM recently shared their interests and activities with *After Hours™*, a Medical World News® program that takes viewers beyond the traditional veterinary space and outside the industry to showcase the hobbies and passions of animal care professionals.

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CLIF PET Plant Based Jerky

CLIF PET Plant Based Jerky are soft and chewy treats that feature 7 simple, nutritious ingredients. They are free of corn, wheat, soy, and artificial additives. The easy-to-digest recipes come in 3 varieties: sweet potato and blueberry, butternut squash and cranberry, and pumpkin and apple.

clifbar.com/clifpet

K9 Mask Dog Air Filter

With an N95 air filter option, the Good Air Team K9 Mask dog air filter offers a new way to protect working dogs from opioid inhalation when assisting police officers in drug raids.

k9mask.com

Dr Damian CBD for Dogs

Dr Damian CBD oil droppers help reduce stress, enhance joint mobility, and promote healthy skin. The products are tested by a third-party lab and contain US-grown hemp and no THC.

Dr Damian CBD for dogs come in 3 varieties: 120 mg for dogs who are 4 to 20 lb, 450 mg for dogs who are 16 to 70 lb, and 1200 mg for dogs who are over 58 lb. They also are available in 3 flavors: chicken, beef, and unflavored.

drdamiancbd.com

VIRTUAL CLIENT PORTAL, ALL-NATURAL ANTIPEST SPRAY, AND A DIGITAL WELLNESS SYSTEM

Shepherd Veterinary Software pet portal

Shepherd Veterinary Software created a pet portal that provides clients with the ability to request appointments and prescription refills online. This new tool aims to help relieve front-desk stress. The veterinary team can respond to each request, quickly add the appointment to their schedule, and inform the client. Clients can also access their pet’s prescription history and check the number of refills remaining.

shepherd.vet

Pet Wellness Direct Protect Dog Shampoo and Protect Home + Dog Spray

These 2 safe, all-natural antipest products effectively kill fleas, ticks, and other insects on contact. Both the Pet Wellness Direct Protect Dog Shampoo and Protect Home + Dog Spray are made of plant-based ingredients, containing cedar oil, rosemary oil, lemongrass oil, coconut oil, and aloe. They do not include any harsh soaps or detergents and are safe for use on pets, furniture, carpets, and bedding throughout the year.

petwellnessdirect.com/products/protect-dog-shampoo-protect-home-dog-spray

Whistle Health

Whistle Health is a data-driven artificial intelligence–enabled device that translates dogs’ every movement into a personalized and holistic wellness index. It uses trillions of clinical insights and data points to track health behaviors such as drinking, eating, scratching, sleeping, licking, fitness, and activity. When Whistle Health is coupled with the Whistle app, the device can detect and alert pet parents of any potential health issues (eg, excessive scratching or changes in eating). Pet parents can then be connected to a veterinarian through Whistle’s Ask a Vet service.

whistle.com
**INDICATION:** For appetite stimulation in dogs.

**IMPORTANT SAFETY INFORMATION:** For use in dogs only. Do not use in dogs that have a hypersensitivity to capromorelin. Use with caution in dogs with hepatic dysfunction or renal insufficiency. The safe use of Entyce has not been evaluated in breeding, pregnant or lactating dogs. The most common adverse reactions included diarrhea, vomiting, elevated blood urea nitrogen, polydipsia, and hypersalivation. Please see accompanying brief summary for prescribing information.

The effectiveness of Entyce has not been evaluated beyond 4 days of treatment in the clinical field study.

*Compared to 4.5/10 control dogs. Study enrolled client-owned dogs (N=244) with decreased appetite for at least 2 days, including dogs with a variety of comorbid conditions. The dogs were randomized 2:1 to receive Entyce 3 mg/kg (n=171) or vehicle control (n=73) for 4 days. 177 inappetent dogs were assessed for effectiveness. All dogs enrolled in the study were evaluated for adverse reactions throughout the study.*


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Entyce™
(capromorelin oral solution)

30 mg/mL
For oral use in dogs only
Appetite Stimulant

Caution:
Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian. Before using Entyce, please consult the product insert, a summary of which follows:

Indication:
ENTYCE (capromorelin oral solution) is indicated for appetite stimulation in dogs.

Dosage and Administration:
Administer ENTYCE orally at a dose of 3 mg/kg (1.4 mg/lb) body weight once daily. To administer ENTYCE, gently shake the bottle, and then withdraw the appropriate amount of solution using the provided syringe. Rinse syringe between treatment doses.

The effectiveness of ENTYCE has not been evaluated beyond 4 days of treatment in the clinical field study (See Effectiveness). See product insert for complete dosing and administration information.

Contraindications:
ENTYCE should not be used in dogs that have a hypersensitivity to capromorelin.

Warnings:
Not for use in humans. Keep this and all medications out of reach of children and pets. Consult a physician in case of accidental ingestion by humans. For use in dogs only

Precautions:
Use with caution in dogs with hepatic dysfunction. ENTYCE is metabolized by CYP3A4 and CYP3A5 enzymes (See Clinical Pharmacology).
Use with caution in dogs with renal insufficiency. ENTYCE is excreted approximately 37% in urine and 62% in feces (See Adverse Reactions and Clinical Pharmacology).

The safe use of ENTYCE has not been evaluated in dogs used for breeding or pregnant or lactating bitches.

Adverse Reactions:
In a controlled field study, 244 dogs were evaluated for safety when administered either ENTYCE or a vehicle control (solution minus capromorelin) at a dose of 3 mg/kg/day for 4 days. Enrolled dogs had a reduced or absent appetite for a minimum of 2 days prior to day 0 and had various medical conditions: arthritis (40); gastrointestinal disease (24); allergy (22); dental disease (22); cardiovascular disease (16); renal disease (13); and others. Some dogs may have experienced more than one of the adverse reactions during the study.

The following adverse reactions were observed:

Table 1: Adverse Reactions reported in dogs administered ENTYCE oral solution compared to vehicle control

<table>
<thead>
<tr>
<th>Adverse Reactions</th>
<th>ENTYCE (n = 171) n (%)</th>
<th>Vehicle Control (n = 73) n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GASTROINTESTINAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diarrhea</td>
<td>12 (7.0 %)</td>
<td>5 (6.8 %)</td>
</tr>
<tr>
<td>Vomiting</td>
<td>11 (6.4 %)</td>
<td>4 (5.5 %)</td>
</tr>
<tr>
<td>Hypersalivation</td>
<td>4 (2.3 %)</td>
<td>0 (0.0 %)</td>
</tr>
<tr>
<td>Abdominal discomfort</td>
<td>2 (1.2 %)</td>
<td>0 (0.0 %)</td>
</tr>
<tr>
<td>Flatulence</td>
<td>2 (1.2 %)</td>
<td>0 (0.0 %)</td>
</tr>
<tr>
<td>Nausea</td>
<td>2 (1.2 %)</td>
<td>0 (0.0 %)</td>
</tr>
<tr>
<td><strong>CLINICAL PATHOLOGY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevated blood urea nitrogen</td>
<td>7 (4.1 %)</td>
<td>2 (2.7 %)</td>
</tr>
<tr>
<td>Elevated phosphorus</td>
<td>4 (2.3 %)</td>
<td>1 (1.4 %)</td>
</tr>
<tr>
<td>Elevated creatinine</td>
<td>1 (0.6 %)</td>
<td>1 (1.4 %)</td>
</tr>
<tr>
<td><strong>OTHER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polydipsia</td>
<td>7 (4.1 %)</td>
<td>1 (1.4 %)</td>
</tr>
<tr>
<td>Lethargy/depression</td>
<td>2 (1.2 %)</td>
<td>0 (0.0 %)</td>
</tr>
</tbody>
</table>

The following adverse reactions were reported in < 1% of dogs administered ENTYCE: hyperactivity, increase fecal volume, increase gut sounds, and polyuria.

To report suspected adverse events, for technical assistance or to obtain a copy of the Safety Data Sheet (SDS), contact Elanco US Inc. at 1-888-545-5973. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or http://www.fda.gov/reportanimalae.

Effective:
Effectiveness: Laboratory Effectiveness Study: Twenty four healthy Beagle dogs (6 dogs per sex in each group) with normal appetite were randomized into two groups and dosed daily with ENTYCE (capromorelin oral solution) at 3 mg/kg/day or vehicle control (solution minus capromorelin) to compare food intake over a 4-day period. The dogs were 13 months of age and weighed between 6.5 and 12.5 kg at the time of randomization. Six dogs administered ENTYCE repeatedly exhibited salivation post dosing and two dogs administered vehicle control exhibited salivation only one time on study day 0. Emesis was observed in one dog administered ENTYCE on study day 1. Dogs administered ENTYCE at a dose of 3 mg/kg/day for 4 consecutive days had statistically significantly increased food consumption compared to the vehicle control group (p < 0.001).

Clinical Field Study: Effectiveness was evaluated in 177 dogs (121 dogs in the ENTYCE group and 56 dogs in the vehicle control group) in a double-masked, vehicle controlled field study. Dogs with a reduced appetite or no appetite, with various medical conditions, for a minimum of 2 days prior to day 0 were enrolled in the study. The dogs ranged in age from 4 months to 18 years. Dogs were randomized to treatment group and dosed once daily for 4 days with ENTYCE at 3 mg/kg or vehicle control. Dogs were assessed for appetite by owners on day 0 and day 3 ± 1 using an “increased”, “no change” or “decreased” scoring system. Dogs were classified as a treatment success if the owner scored their dog’s appetite as “increased” on day 3 ± 1. The success rates of the two groups were significantly different (p = 0.0078); 68.6% (n = 83) of dogs administered ENTYCE were successes, compared to 44.6% (n = 25) of the dogs in the vehicle control group.

Storage Conditions:
Store at or below 86° F (30° C)

How Supplied:
30 mg/mL flavored solution in 10 mL, 15 mL and 30 mL bottles with measuring syringe
Approved by FDA under NADA # 141-457
Manufactured for:
Elanco US Inc.
Greenfield, IN 46140, USA
Revised: September 2020

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The latest products and innovative technology in veterinary medicine

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### ALERT SYSTEM FOR MISSING PETS, FORMULA TO RELIEVE CAT ANXIETY, AND ADVICE FROM AN APP

#### FidoAlert and TabbyAlert

FidoAlert.com (for dogs) and TabbyAlert.com (for cats) are free online lost and found platforms to help missing pets quickly and safely reunite with their owners. All pet owners in the US can enroll their companion animals in the national network that generates SMS text and email alerts when a pet is lost or found. The alerts include the missing pet’s photo and additional information to raise awareness of them, similar to an Amber Alert.

- [fidoalert.com](http://fidoalert.com)

#### Kitty Scent Spray

Kitty Scent Spray

Animal Science Labs formulated this scent spray to relieve cat anxiety by using the cat owner’s natural scent. Kitty Comfort Spray combines a cat owner’s scent molecules in a highly concentrated formula with therapeutic-grade essential oils, including lavender, geranium, and roman chamomile. The spray is all natural and plant based.

- [k9comfortspray.com/products/100-natural-ingredients-br-kitty-comfort-spray](http://k9comfortspray.com/products/100-natural-ingredients-br-kitty-comfort-spray)

#### Upilio

Upilio is an artificial intelligence–driven app that provides reliable, customized veterinary advice on various pet species for pet owners to incorporate a proactive approach to their care. The app utilizes a smart algorithm that infers domain information and gives recommendations based on a pet’s health, age, and chronic condition. Upilio does not replace a veterinary visit and does not replace a veterinary-client relationship.

- [tupilio.io](http://tupilio.io)

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### EXTRA LARGE LITTER BOX, BOWLS OF HEALTHY INGREDIENTS, AND A TOPICAL HEARTWORM PREVENTIVE

#### PetSafe Multi-Cat Litter Box

PetSafe’s Multi-Cat Litter Box is extra large in size and was created for multicat families to provide ample space for felines to share. It simplifies cleaning with tall sides to ensure litter remains inside the box while the heavy-duty metal scoop conveniently scoops waste. The covered waste bin also has individual, removable compartments for the litter scoop and waste for organization adjacent to the box. Magnets underneath the waste bin lid keep it closed until it’s time to scoop.

- [store.petsafe.net/multi-cat-litter-box?filter1=kitten](http://store.petsafe.net/multi-cat-litter-box?filter1=kitten)

#### Wellness Bowl Boosters Freshly

Wellness Bowl Boosters Freshly are made with real, healthy ingredients chosen at the peak of freshness, then frozen to encapsulate nutrients. They can be given on their own for a balanced meal or added to a dog’s kibble for a nutritious, supercharged bowl. The meat and vegetable recipes help promote a soft skin and coat, all-day energy, digestion, strong teeth and bones, and immune health. They come in chicken and butternut squash, beef and carrots, and turkey and sweet potatoes. A puppy turkey and rice recipe is coming out soon.

- [wellnessbowlboostersfreshly.com](http://wellnessbowlboostersfreshly.com)

#### Midamox (imidacloprid + moxidectin)

Midamox (imidacloprid + moxidectin) is a line of topical solutions that protects against heartworm in cats and dogs; fleas in cats and dogs; whipworms in dogs; roundworms in cats and dogs; hookworms in cats and dogs; ear mites in cats; and sarcoptic mange in dogs. This product offers a variety of dosage volumes or sizes to accommodate different weights of cats and dogs.

CE GUIDELINE

CE CATEGORY: Medical
CE METHOD OF DELIVERY: Journal with online test available anytime
CE HOURS: 1.0 HOUR
This program is pending RACE-approval for 1.0 CE credit hour in jurisdictions that recognize RACE-approval. The RACE-approval will be updated online once approved. RACE (Registry of Approved Continuing Education) is a program of the American Association of Veterinary State Boards (AAVSB), established as a resource for review of continuing education Providers and their programs. More information can be found at www.aavsb.org/ce-services.

CE CERTIFICATE REQUIREMENTS
Participants must receive a 70% grade or higher on the exam to receive CE credit hours. After successfully completing the test, you can immediately access your results. When you receive a grade of 70% or higher, your CE certificate will be available as a PDF for download. Should you need to retake the test for any reason, you may do so immediately.

CE SURVEY
Your educational experience is important to us. Please consider providing your feedback by taking our survey both before and after reading the article. (Refer to the Instructions section.) We will use this information to determine if educational objectives have been achieved. Please note, this survey is optional and will not be considered nor graded as part of earning a CE certificate. There are no right or wrong answers.

INSTRUCTIONS
(to be completed in this order)
1. Pre-CE Survey: Take the online survey online prior to reading the article.
2. Article: Begin the course by reading the article within the dvm360® magazine in its entirety.
3. Exam: Take the exam online after reading the article. (Refer to the test question at the end of the article.)
4. Post-CE Survey: Take the online survey after completing the CE exam.

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Feline Atopic Skin Syndrome,
Formerly Cat Atopy: A REVIEW
As of 2021, feline atopic skin syndrome (FASS) refers to the condition formerly known as atopy in the cat. We will discuss characteristics of the syndrome and what key differentials are. Treatment options will be discussed.

**Program Agenda**

- Discussion of feline atopic skin syndrome (FASS)
- Differential diseases to consider in the diagnosis of FASS
- Treatment options
  - Allergen-specific immunotherapy
  - Steroids, yes or no?
  - Antihistamines?
  - Cyclosporine?
  - Janus kinase inhibitor?

**Learning Objectives**

The participant will be able to:

1. Understand what diagnoses are included in the FASS diagnosis and how to reach that conclusion
2. Compare the treatment options available
3. Develop a treatment plan based on individual patient needs

As of 2021, feline atopic skin syndrome (FASS) refers to the condition formerly known as atopy in the cat. The new terminology encompasses what was known as “nonfood/nonflea allergic dermatitis,” “feline allergic dermatitis,” and/or “feline atopic-like syndrome.” For professionals who have been in the veterinary field for several years, it has been commonly known that when flea allergy is not a factor, an injection of the long-acting steroid methylprednisolone acetate is prescribed to treat this disease. However, only 2 retrospective studies have evaluated the use of this prednisolone derivative glucocorticoid to treat idiopathic eosinophilic granulomas in 55 cats. In 1 study, 29 of 43 cats that received no treatment achieved a complete response. In the second study, 66 of 194 cats achieved a complete response when given 20 mg/kg of methylprednisolone acetate subcutaneously (SC) every 2 weeks for 2 to 3 injections. There are numerous other options for treating this newly termed disease, which is second in occurrence only to flea allergy dermatitis (FAD).

Since FASS is a chronic disease, alternatives to long-acting steroid treatments commonly used for a disease that likely will last the cat’s lifetime need to be considered.

Earlier studies at Cornell University and the University of Georgia determined that 15% to 17% of cats were diagnosed with FASS, whereas a more current study indicated that 12% to 32% were given this diagnosis. Unfortunately, FASS is still poorly investigated in comparison to atopy in other species, but advances in the immunopathogenesis of FASS are increasing, and research is ongoing. Immunologically, like dogs and humans affected by atopy, cats with FASS have elevated CD4+ T-lymphocytes in skin with lesions, which supports a role of helper T cell type 2 (Th2)–mediated immunity. Affected cats have an increased CD4+/CD8+ ratio and greater populations of CD1a+ Langerhans cells and interleukin-4 (IL-4)–positive CD4+ Th2 cells—all of which support Th2 involvement (including of IL-5 and IL-13). A recent study demonstrated a broad array of immune secretory cytokines, which is associated with a mixed helper T cell type 1 (Th1) and Th2 inflammatory response, in the serum of cats with FASS.

When cytokine expression in cats with allergic dermatitis or asthma was evaluated, feline allergic diseases exhibited different pathologic mechanisms from allergic diseases in other species. In dogs and humans, skin barrier function alterations exist, yet little is known about barrier function in cats with FASS. Immunoglobulin E (IgE) involvement has been difficult to demonstrate in cats, unlike in dogs and humans, so the relevance of allergen-specific IgE in cats is still uncertain. Thus, there are a few similar aspects of allergy between cats, humans, and dogs; however, overall, the pathologic mechanisms and clinical presentations of atopy in cats differs from those in humans and canines.

There does not appear to be a clear breed predisposition in cats with FASS, but breeds overrepresented include Abyssinian, Persian, and Siamese; further, the condition is found in more females (58.4%) than males. In my midwestern United States practice, we had an overabundance of gold or gold color—containing cats with FASS; their coloring was gold, gold and white, calico, and tortoise shell. Unlike atopy in dogs, the age of onset of FASS in cats is variable, ranging from age 6 months to 14 years. Most show clinical signs at less than 3 years of age, but 1 study indicated that 22% of cases started at 7 years or older. Do not rule out atopy as a differential if suspicious clinical signs are seen in an older cat. House dust–mite allergy is the most common allergy in dogs, cats, and humans, which may explain why 75% of cats present with nonseasonal disease (after ruling out food allergy, which also is nonseasonal).

**Signs and Symptoms**

The main clinical sign of FASS in cats is pruritus. This itching may result in self-induced alopecia or lesions (eg, miliary dermatitis, plasma cell pododermatitis, eosinophilic granuloma complex, exfoliative lesions, seborrhea, chin acne with or without otitis externa). Secondary cutaneous bacterial infections, once thought to be rare in cats, are apparent in FASS cats.

Malassezia species has been isolated more frequently in allergic vs nonallergic cats. I often have found...
Malassezia-related lesions on the chin and face, possibly resulting from the cat pawing at its chin downward from the ears and contaminating the chin with the yeast otitis, which is often present. Otitis externa has been reported in 21% of FASS cats. Less common clinical signs (eg, respiratory [asthma], ocular [conjunctivitis], and/or gastrointestinal [GI] involvement) have been reported. So, unlike dogs, cats are unique in their characteristics of FASS, in that they may manifest clinical signs at an older age and may have 1 or more extremely variable clinical signs involving numerous areas of the body. In 1 Australian study, clinical distribution of lesions was as follows: head (71%), neck (51%), ventral abdomen (51%), limbs (38%), pinnae (31%), dorsum/rump (31%), and feet (16%).

**DIAGNOSIS**

FASS in cats is a diagnosis of exclusion. Differentials that mimic FASS include FAD, food allergy, demodicosis, Malassezia dermatitis, idiopathic ulcerative dermatitis, ectoparasitosis (ie, involving Cheyletiella or Notoedres), pemphigus foliaceus, dermatophytosis, mosquito bite hypersensitivity, and hyperthyroidism. Many of these (ie, FAD, demodicosis, Malassezia dermatitis, ectoparasitosis, pemphigus, dermatophytosis) can be ruled out quickly during the physical examination.

As with any dermatologic disease, a thorough history must be taken to determine the length of time that the cat has had problems, response to medication, areas of the body affected, age of onset, dietary history, exposure to other pets, and other factors. Importantly, serum or intradermal skin testing to “prove” the cat has FASS is not acceptable. On either of these tests, cats may have a positive IgE reaction and not be clinical or be clinical and not test positive. Serum and/or intradermal allergy testing is only used after the diagnosis of FASS has been determined; the results are used to formulate an immunotherapy solution, be it injectable or sublingual. In nonsessional affected cats, prescription of an 8-week elimination diet trial is advised to rule out food allergy, as clinical symptoms of FASS and food allergy may mimic one another. Food allergy in cats also may present with GI signs and conjunctivitis. In a recent study, the incidence of FASS and food allergy together in the same patient was low (2.4%).

**TREATMENT**

After the diagnosis of FASS is achieved, therapy for that patient should be tailored to the individual cat, considering the owner’s abilities and finances and the cat’s dwelling (indoor or outdoor) and personality. Treatment for FASS is multimodal, involving numerous therapies and combinations of therapies—with more options available than for atopic dogs. Therapeutic options include allergen-specific immunotherapy, injectable or sublingual (SLIT); short-acting glucocorticoids; antihistamines; and modified cyclosporine. Use of oclacitinib should be accompanied by close monitoring of the cat until further data is made available, as it is an off-label drug and there is a lack of long-term studies related to this treatment option.

**Immunotherapy**

SLIT is the only treatment for FASS that induces tolerance and enables reduction or complete elimination of other long-term treatments. In other words, it can elicit a cure. In cats, a 60% to 70% control rate has been found with immunotherapy based on serum or intraderal testing. In humans, immunotherapy induces regulatory T cells and increases IL-10 and TNF-β levels, which result in reduced Tα,2 cytokine production. Sublingual immunotherapy in cats is relatively new, but it appears to be promising. Currently, 25% of veterinary dermatologists surveyed have cats on SLIT. In a study of 22 FASS cats allergic to house-dust mites, 19 of 22 cats showed improvement after 3 months on SLIT.

Whichever method of testing to determine allergens to be included in the immunotherapy solution, successful treatment depends upon the positives corresponding to the time of the year that the cat is affected. It is not a matter of just including all of what is deemed positive on the test results. A downside to immunotherapy is the time lag (average, 3–8 months) before results are seen. However, the safety and ultimate possible “cure” are certainly worth the effort. When initially staring immunotherapy, other oral medications (eg, antihistamines, modified cyclosporine, or short-term, short-acting glucocorticoids) may be employed. Many clients are surprised at how much easier it is to administer the SC injections once weekly than to “pill” their cat once or twice daily. However, there are many different frequencies of administration, ranging from twice weekly to once weekly to once every 2 weeks to once monthly.

The owner must be able to understand what immunotherapy is and what the veterinarian is trying to accomplish. An observant owner is essential; after delivering a dose of immunotherapy, the veterinarian must be contacted if the cat becomes more pruritic and needs a dose adjustment. It is not a matter of just “flying through” the administration schedule without paying attention to how the cat is doing. An observant owner is as important as matching the allergen positives with the time of the year that...
the cat is affected. Owners must be made aware that immunotherapy alone may not totally control their pet’s symptoms and that supplemental medications occasionally may be needed during increased allergen periods. The cost of immunotherapy is probably lower than that of other available therapies. The allergy solution itself is less expensive than are oral therapies, but some oral therapies require the expense of routine blood work to monitor for any changes during therapy. Our office requires yearly physical examinations for our immunotherapy patients to monitor their progress.

Importantly, be certain to dispense 1-mL syringes for SC immunotherapy administration. Although it sounds elementary, pharmacies occasionally dispense 3-mL tuberculin syringes even though the veterinarian prescribes use of a 1-mL tuberculin syringe. Along with the big difference in dosing, this problem may result in dosing errors and confuse the owner. I am proud to say that 1 of my clients, who has a FASS cat and was errors and confuse the owner. I am proud to say that her cat was playful again after glucocorticoid therapy is discontinued. Cats are more steroid-tolerant than are dogs, but that certainly doesn’t mean that use of steroids in cats should not be conservative. In particular, older cats can become hyperglycemic after a long-acting glucocorticoid injection; even after 1 injection, a cat can experience heart failure.18

When prescribing glucocorticoids for cats, short-term (ie, 2-4 weeks) prednisolone therapy may be used as the veterinarian communicates closely with the owner. This would involve administration of 2.5 to 5 mg of prednisolone orally (PO) once daily for 3 to 7 days, followed by dosing every 2 to 3 days. Most owners who have used glucocorticoids are aware of the potential AEs (ie, hyperglycemia/possible diabetes, pancreatitis, muscle weakness, thin skin, hair loss) and do not want their cats so affected. If a cat has been on long-term steroid therapy and it is no longer effective, the type of steroid used should be changed to one that appears to be “different,” as tolerance has occurred. For example, instead of prednisolone, change to methylprednisolone 4 mg PO once daily followed by 2 mg (0.5 tablet) PO given every 2 to 3 days. If the owner has trouble “pilling” the cat, prescribe 0.75-mg dexamethasone tablets; give 0.375 mg (0.5 tablet) PO once daily for 2 to 3 days, followed by administration on Monday, Wednesday, and Friday or twice weekly. A recent study reported that using dexamethasone sodium phosphate injection, 4 mg/mL, administered PO at 0.2 mg/kg once daily for 7 days then 2 or 3 times weekly was successful.19 For owners unable to administer oral steroids, transdermal steroids are not bioavailable.

When maintaining a cat on glucocorticoids (which is not preferred), remember to monitor urinalyses and blood glucose routinely.

### Antihistamines

When used for FASS, antihistamines have conflicting results. In a 2008 study using cetirizine, owners reported a 41% success rate in allaying symptoms; in 2013, however, a repeat study showed cetirizine to be ineffective.22 The main problem with using any of the antihistamines in cats is the bitter taste. It may be possible to administer the first dose, but hypersalivation and evasion may occur when the second attempt is made. Many owners do not understand that cats tend to hypersalivate from the bitterness; instead, they think that the cat is having a seizure or some other serious problem. Combining an antihistamine with an oral glucocorticoid may enable less use of the steroid; however, daily or twice-daily dosing is still needed. Oral doses of antihistamines for FASS in cats are as follows:

- Hydroxyzine hydrochloride or pamoate, 1 mg/lb of body weight twice daily;
- Chlorpheniramine, 2-4 mg twice daily;
- Clemastine, 1.34 mg ½ tablet twice daily or 0.05 to 0.1 mg/kg twice daily;
- Loratadine, 5 to 10 mg once daily;
- Cetirizine, 2.5 mg or 1 mg/kg once daily; or
- Cyproheptadine, 2 mg twice daily.

If an owner is willing to administer daily antihistamines to an allergic cat, and if the medication is effective, tolerance may develop as it can in humans. Owners may administer the antihistamine for 3 weeks on and 1 week off in a cycle to avoid tolerance. For the 1 week off, a short-acting glucocorticoid given daily or every other day may be used to relieve FASS symptoms. The intent is to use as little steroid as possible by combining it with the antihistamine therapy.

### Cyclosporine

Modified cyclosporine (Atopica; Elanco) is a United States Food and Drug Administration (FDA)-approved treatment for FASS. In a study of 144 cats with FASS, 65.1% of 71 cats treated with modified cyclosporine and 9.2% of cats in the placebo group showed symptom relief.23 Modified cyclosporine at 5 to 7.5 mg/kg given once daily can be used long-term to control FASS. A cat that has been on long-term steroids may have muscle atrophy and thin skin; nothing is more satisfying than having the owner tell me that her cat was playful again after glucocorticoid therapy is discontinued. Cats are more steroid-tolerant than are dogs, but that certainly doesn’t mean that use of steroids in cats should not be conservative. In particular, older cats can become hyperglycemic after a long-acting glucocorticoid injection; even after 1 injection, a cat can experience heart failure.18

When prescribing glucocorticoids for cats, short-term (ie, 2-4 weeks) prednisolone therapy may be used as the veterinarian communicates closely with the owner. This would involve administration of 2.5 to 5 mg of prednisolone orally (PO) once daily for 3 to 7 days, followed by dosing every 2 to 3 days. Most owners who have used glucocorticoids are aware of the potential AEs (ie, hyperglycemia/possible diabetes, pancreatitis, muscle weakness, thin skin, hair loss) and do not want their cats so affected. If a cat has been on long-term steroid therapy and it is no longer effective, the type of steroid used should be changed to one that appears to be “different,” as tolerance has occurred. For example, instead of prednisolone, change to methylprednisolone 4 mg PO once daily followed by 2 mg (0.5 tablet) PO given every 2 to 3 days. If the owner has trouble “pilling” the cat, prescribe 0.75-mg dexamethasone tablets; give 0.375 mg (0.5 tablet) PO once daily for 2 to 3 days, followed by administration on Monday, Wednesday, and Friday or twice weekly. A recent study reported that using dexamethasone sodium phosphate injection, 4 mg/mL, administered PO at 0.2 mg/kg once daily for 7 days then 2 or 3 times weekly was successful. For owners unable to administer oral steroids, transdermal steroids are not bioavailable.

When maintaining a cat on glucocorticoids (which is not preferred), remember to monitor urinalyses and blood glucose routinely.

### Antihistamines

When used for FASS, antihistamines have conflicting results. In a 2008 study using cetirizine, owners reported a 41% success rate in allaying symptoms; in 2013, however, a repeat study showed cetirizine to be ineffective.22 The main problem with using any of the antihistamines in cats is the bitter taste. It may be possible to administer the first dose, but hypersalivation and evasion may occur when the second attempt is made. Many owners do not understand that cats tend to hypersalivate from the bitterness; instead, they think that the cat is having a seizure or some other serious problem. Combining an antihistamine with an oral glucocorticoid may enable less use of the steroid; however, daily or twice-daily dosing is still needed. Oral doses of antihistamines for FASS in cats are as follows:

- Hydroxyzine hydrochloride or pamoate, 1 mg/lb of body weight twice daily;
- Chlorpheniramine, 2-4 mg twice daily;
- Clemastine, 1.34 mg ½ tablet twice daily or 0.05 to 0.1 mg/kg twice daily;
- Loratadine, 5 to 10 mg once daily;
- Cetirizine, 2.5 mg or 1 mg/kg once daily; or
- Cyproheptadine, 2 mg twice daily.

If an owner is willing to administer daily antihistamines to an allergic cat, and if the medication is effective, tolerance may develop as it can in humans. Owners may administer the antihistamine for 3 weeks on and 1 week off in a cycle to avoid tolerance. For the 1 week off, a short-acting glucocorticoid given daily or every other day may be used to relieve FASS symptoms. The intent is to use as little steroid as possible by combining it with the antihistamine therapy.

### Cyclosporine

Modified cyclosporine (Atopica; Elanco) is a United States Food and Drug Administration (FDA)-approved treatment for FASS. In a study of 144 cats with FASS, 65.1% of 71 cats treated with modified cyclosporine and 9.2% of cats in the placebo group showed symptom relief.23 Modified cyclosporine at 5 to 7.5 mg/kg given once daily can be used long-term to control FASS.
CONTINUING EDUCATION

CE EXAM

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1. Feline Atopic Skin Syndrome (FASS) is seen in cats:
   a. Of all genders and breeds
   b. Primarily in male cats
   c. Only in cats less than 12 months of age
   d. Most commonly in cats greater than 7 years of age

2. Accepted method/s of diagnosing FASS in cats include:
   a. Conducting serum allergy testing
   b. Intradermal skin testing
   c. Feeding a hypoallergenic diet
   d. Excluding all other causes of allergy

3. Glucocorticoids may have the following adverse effects when used in cats:
   a. Congestive heart failure
   b. Tolerance
   c. Diabetes
   d. All the above

4. Modified cyclosporine may be used in all but the following for FASS in cats:
   a. Outdoor cats
   b. FASS cats with nonseasonal symptoms
   c. In combination with immunotherapy
   d. In cats eating raw meat diets

5. Which of the following treatments for FASS can alter the course of the disease, i.e., elicit a cure?
   a. Modified cyclosporine
   b. Glucocorticoids
   c. Immunotherapy
   d. Antihistamines

INSTRUCTIONS:
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or given initially when starting oral or injectable immunotherapy. Efficacy may be seen in up to 4 weeks; after symptoms are under control using the daily dose, the dose can be tapered to every other day or twice weekly successfully (70% and 50%, respectively). The most common AE is GI upset; however, administration with food may be helpful, and it does not interfere with its bioavailability. Modified cyclosporine should be used cautiously in outdoor cats or those eating raw meat diets, as toxoplasmosis recrudescence may occur, particularly in toxoplasmosis-naive cats.

A commercially available modified cyclosporine liquid is available; therefore, there is no need have the oral solution compounded. In studies, use of compounded modified cyclosporine liquid has resulted in an inferior product with doubtful bioavailability and stability.

Oclacinib
Oclacinib, a Janus kinase inhibitor approved by the FDA for use in dogs, has been given to cats with FASS off-label. Oclacinib has been used in allergic cats during short-term studies, with 1-mg/kg doses given PO every 12 to 24 hours. The half-life of the drug in cats is 2.3 hours compared with 4.1 hours in dogs, accounting for the higher dose used in cats.

The safety of long-term use of this drug in cats has not been determined. The manufacturer recently advised against its use in this species; informed consent from the owner along with diligent monitoring should be employed should you decide to use this off-label medication. A recent report of fatal toxoplasmosis recrudescence occurred in an feline immunodeficiency virus–positive cat on oclacinib for FASS.

Monoclonal antibodies
Lokivetmab, the canine anti-IL-31 monoclonal antibody used for canine atopy, should not be used in cats. It is a monoclonal antibody adapted for use in dogs; if used in cats, would be recognized as foreign, and it may cause anaphylaxis.

Multimodal therapy
A multimodal approach is needed when treating FASS in cats. There is rarely a “go to” medication that fits every patient. The owner’s ability and finances and the cat’s temperament must be considered, along with whether the symptoms are seasonal or nonseasonal. My preference for treatment is allergy testing and immunotherapy starting with either SLIT (depending on whether the owner can administer an oral liquid twice daily) or once weekly injections while using a short-term, short-acting glucocorticoid; an antihistamine; or modified cyclosporine, alone or in combination. The goal is to use as little steroid as possible; in nonseasonal affected cats (usually with house dust–mite allergy), I avoid keeping the cat on a year-round steroid, even at what is deemed as “low dose.”

Short-acting glucocorticoids can be used daily for 3 to 7 days to break an itch cycle during flare-ups as the designated current treatment plan is resumed. If a few days of short-acting glucocorticoid therapy does not break the itch cycle, be sure to get the patient into the office for an examination, as ectoparasites may be a factor. In several FASS patients I have treated over the years, fleas or Cheyletiella have caused occasional flareups in cats that have been well maintained on immunotherapy. When cats on immunotherapy experience a flare-up, their owners must be questioned to determine whether it occurred immediately after the injection, since the dose may be too high for that time of year. If that is the case, I tell the owner to skip an injection and then to give half of the next upcoming dose. The response dose should be reported so that the veterinarian can decide on future therapy. If the owner reports improvement in the cat’s pruritus for a few days after the injection, the dose can be slowly increased by 0.1 mL/week until a successful maintenance dose is reached. Many veterinarians are afraid to make a mistake in dosing when using immunotherapy, but there is no dosage that is “written in stone.” Most veterinary dermatologists use dosing as they were taught by their mentors. It is logical that if a current dose seems to cause pruritus, the dose should be reduced until the situation is no longer aggravated.

SUMMARY

FASS, the new terminology for feline atopy, describes an allergic skin disease that is associated with environmental allergies in cats. It is the second most common allergy-related condition noted in cats after FAD. There is no one-size-fits-all treatment for cats with this disease. FASS treatment is multimodal; it must be tailored both to the cat and the owner. In the past, long-acting glucocorticoid injections were given for this condition, but tolerance and cardiac and/or diabetic issues may develop with their repeated use. With new insights into the pathogenesis of this disease in cats, which differs from the disease in humans and dogs, new treatments are certainly on the horizon.

References available online at dvm360.com
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The health of the animal kingdom, the environment, and of humans all benefit from quality preventive veterinary medicine. Veterinary preventive medicine is a discipline concerned with improving animal and human health through the prevention and control of animal diseases, infectious waste contamination and related human illnesses. The American College of Veterinary Preventive Medicine (ACVPM) believes the process of becoming board certified in veterinary preventive medicine enhances personal skills and expands professional expertise to this end. ACVPM diplomates work in private practice, regulatory medicine, diagnostic medicine, extension service, public health, epidemiology, food safety, research, teaching, herd health management, population medicine, consulting, and other similar activities.

Established in 1950, the ACVPM is one of the oldest veterinary specialty organizations recognized by the American Veterinary Medical Association (AVMA). The ACVPM offers the option of a specialty in epidemiology, with board certification in preventive medicine. Becoming a diplomate means joining some of the most distinguished veterinary professionals in preventive medicine and public health at local, state, national and international levels. Nearly 1200 active and emeritus diplomates currently belong to the ACVPM.

The ACVPM began when 12 veterinarians formed a council to establish the American Academy of Veterinary Public Health during the 1949 annual meeting of the AVMA in Detroit, Michigan. James H. Steele, DVM, MPH, a legend in veterinary public health, served as the first secretary. The council created a committee to establish the definition of veterinary public health and another to write the bylaws and include criteria of eligibility. The council met again in October of 1949 and redesignated itself as the American Board of Veterinary Public Health (ABVPH) and was incorporated as a nonprofit organization in 1950.

The ABVPH spent its first year processing and approving applicants for charter fellowships, adding 21 additional ABVPH fellows. In 1951, the AVMA House of Representatives approved the ABVPH and the American College of Veterinary Pathologists as the first recognized specialties in veterinary medicine.

The first board certification exam was conducted in October 1952 at the American Public Health Association meeting in Cleveland, Ohio. Seven military veterinarians took the exam; all passed and were certified as veterinary public health specialists. By 1960, sixty more veterinarians were examined and certified as ABVPH fellows, and the board replaced “fellow” with “diplomate”.

In 1978, the ABVPH transitioned to the ACVPM. This event joined veterinary public health and veterinary regulatory medicine practitioners into a single veterinary preventive medicine specialty organization. It met officially for the first time on July 17, 1978, with Dr John H. Helwig presiding. Helwig was succeeded by Dr William E. Jennings. In honor of these leaders, the ACVPM created the Helwig-Jennings Award to recognize diplomates who have rendered outstanding and prolonged service to the college.

The ACVPM now proudly represents nearly 900 active and 300 emeritus diplomates who represent the wide variety of career option available in veterinary preventive medicine. ACVPM diplomates are in virtually every state and 22 countries and are involved in activities that range from teaching future veterinarians, investigating disease outbreaks, uniformed services, or holding senior leadership positions in local, state, federal...
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Most newly graduated veterinarians are excited (and scared) to perform incredible surgeries, make the weird and elusive diagnosis or touch that special species that inspired their veterinary career. I certainly was! However, it only took a single case of canine distemper, 5 confirmed rabies cases—1 kitten, 3 dogs, and a cow—in my first year out, a case of tetanus in a mandrill baboon, severe malnutrition in a baby spider monkey, and the residual pulmonary damage of chlorine toxicity in some apes for me to convert to a preventive medicine evangelist.

How important is preventive medicine? Or is it preventive care? Is there a difference? Does either one matter in veterinary medicine? The short answer is yes to all of them!

First, let’s address the semantics. Preventive medicine is the practice of promoting patient well-being, according to the American College of Preventive Medicine.1 Although they are different, they seek the same goal: a healthier patient or better clinical outcome. For example, a toxic environmental spill can be cleaned up, but the better approach is to prevent the spill to avoid all impact and damage. This example touches on another important component of preventive medicine in that a holistic approach that encompasses rather than compartmentalizes influences on patient well-being is best. One health, anyone?

Preventive medicine is not a new concept. The first government foray into prevention happened in the 14th century with the passage of the first sanitary act in England to provide for the removal of “nuisances.”2 Since then, preventive medicine provides the foundation for public health today. Veterinary medicine also naturally embraces preventive medicine. If you have ever faced a dog with fulminant canine distemper as I did, then you surely appreciate how simple preventive medicine can be when compared with treating clinical disease to resolution. Yet vaccines represent only a single facet of preventive medicine. Epidemiology, environmental health, food safety, toxins, biostatistics, parasitology, and many other fields can all be found under the preventive medicine umbrella.

dvm360° and the American College of Veterinary Preventive Medicine (ACVPM) recently partnered to enhance the visibility of preventive veterinary medicine within our profession. To that end, the Pocket of Prevention column will be a recurring piece in dvm360° publications. These articles will highlight issues in veterinary preventive medicine as described by diplomates of one of the most professionally diverse specialty colleges—ACVPM. There will be new pears to help you face that exciting (or scary) situation clinically or otherwise professionally.

REFERENCES

and international organizations. Veterinarians who seek diplomate status must successfully pass a 2-day certification exam consisting of a 5-section essay test and a 300-question multiple choice test. These tests cover infectious disease, environmental health, food hygiene or safety, epidemiology, and public administration and health education. Applicants must have graduated from an AVMA-accredited veterinary school, hold the Educational Commission for Foreign Veterinary Graduates certificate or be licensed to practice veterinary medicine in some state, province, territory, or possession of the United States or other country, and have at least 4 years of experience in 3 or more areas of veterinary preventive medicine.

ACVPM diplomates can also seek specialty certification in epidemiology. This AVMA-approved specialty is open to diplomates who meet the eligibility requirements and pass the epidemiology specialty certification exam. The specialty currently has 51 active and 28 emeritus diplomates.

There are many reasons veterinarians apply for ACVPM certification. Military and some federal veterinarians are eligible for board certification specialty pay. In addition, ACVPM certification is a distinguishing professional career accomplishment. Peer recognition for one’s qualifications and competence in the exclusive practice of a specialty is a rewarding experience in and of itself. ACVPM diplomates also share many common professional objectives that focus their efforts and improves the quality of professional services.

The college has not only been an instrument not only for certification of veterinary specialists and the advancement of veterinary public health and preventive medicine but also the basis for the formation of lasting friendships and experiences between likeminded practitioners, as well as enhancing professional relationships. The college has a distinguished heritage, counting among its diplomates some of the most outstanding veterinary personalities in public health and preventive medicine on the national and international scene.

More information about the ACVPM, the board certification process, and the epidemiology specialty can be found at www.acvpm.org.
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Although cats have been the most popular companion pet in the United States, they are under medicalized when compared with dogs. However, this has been changing, as millennials and Generation Z (Gen Z) are demonstrating an obsession with cats. Dogs and even exotic pets are also benefiting from the attention from these younger generations, as was shown when shelters and rescues called for help in getting animals adopted because of the COVID-19 pandemic.¹

When you think about it, millennials’ and Gen Zs’ attachment to their pets isn’t a surprise. These are the generations that refer to pets as fur babies and to themselves as pet parents. Just over 70% of millennial dog caretakers and 55% of cat caretakers say their pet “is like a child,” according to the 2017-2018 American Pet Products Association National Pet Owners Survey. Odds are those numbers may have increased since.

The “Millennials and the Human-Animal Bond” study, by Human Animal Bond Research Initiative and Banfield Pet Hospital, demonstrated the following²:

- Seventy-seven percent of millennials would have a more favorable view of their veterinarian if they discussed the health benefits of the human-animal bond with them.
- Seventy-four percent of millennials would be more likely to visit their veterinarian if they discussed the health benefits of the human-animal bond with them.
- Twenty-five percent of millennials always talk to their veterinarians about the health benefits of pet ownership, more than other generations.

The emotional well-being of their fur babies matters just as much as their medical health to these generations. Wrestle an unwilling dog or fractious cat, and the millennial or Gen Z client will likely not see you again. Worse, you and many others may be reading a negative review, as more clients have become empowered by social media and don’t hesitate to use it for expressing their perceptions.

Word of mouth has always been the most impactful form of advertising. What has changed is that so many can hear or see those words, which can be spread potentially to many others nearly instantaneously.

Any assumption that these millennial and Gen Z clients have no loyalty³⁴ is simply not true. For starters, they’re obviously loyal to their fur babies. If there’s any doubt, consider the following⁵:

- Ninety-two percent of millennials are as concerned about their pet’s health as their own health.
- More millennials would rather spend time with their pet than with their spouse, parents, and friends combined.
- Eighty-six percent of millennials would risk their own life to save their pet.

Be proactive and reassuring of what you know. These clients are going online to search, so why not support their efforts and lead them to credible websites, which can range from stories at dvm360.com to anything ending with a “.edu.” The American Association of Feline Practitioners offers a lot of cat information for the public (www.catfriendly.com), and there’s the Fear Free website for pet parents, where all the stories are reviewed by boarded behavior technicians and veterinary behaviorists (www.fearfreehappyhomes.com). There’s also my website (www.stevedale.tv) and countless others that you may
Vet World View

Instead of a follow-up visit when you may be overbooked, video conferencing—when medically appropriate—with a technician or nurse might not only be preferred by the client but may also benefit you.

Two in 5 Gen Z clients believe their veterinarian is outdated, according to a pulse survey from Weave. The survey suggests 34% of these pet owners want to see similar technology to that used routinely in human medicine, such as digital portals to communicate with doctors, schedule appointments, and receive quick tips.

The overriding message is that millennials and Gen Z care passionate about their fur babies. It’s not that they are disloyal, they just prefer to communicate differently. And considering such changes in communication, that may benefit practices by saving time and money.

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Dale writes for veterinary professionals and pet owners, hosts 2 national radio programs, and has appeared on TV shows, including Good Morning America and The Oprah Winfrey Show. He is on the dvm360® Editorial Advisory Board as well as the boards of the Human Animal Bond Association and EveryCat Foundation. He appears at conferences around the world. Visit stevedale.tv.
Is there a time and place for opinions?

When high-profile stories are in the news, avoiding controversial topics at work can be a challenge.

The Dilemma

Marc Rosenberg, VMD

Rosenberg’s response

We don’t live in a vacuum. The veterinary workplace is not shielded from the world and its problems. I agree with the hospital director’s approach. She tempered her authority with sensitivity. In the interest of long-term workplace harmony, she may have entertained an open discussion on the subject at a later date. Today’s veterinary facilities often see their clerical, technical, and professional staff members as medical tools and not a community of individuals. The empathy and care we extend to our pet patients stems from the staff’s humanity, not from the tools they use for treatments.

Editor’s note: All names and businesses in this dilemma case are fictitious, but the scenario is based on real occurrences.

The King Animal Hospital was a thriving northeastern veterinary practice. Of late, things were starting to get back to some semblance of normal. No more mandatory curbside care, optional mask mandates for pet owners, and the hope that COVID-19 may soon be in the rearview mirror. The King Animal Hospital was truly a successful clinic. A large reason for this was because the staff worked so well together. The hospital director’s goal of maintaining a professional atmosphere and a “no drama policy” was well received and benefited all concerned. That was until recently, when the Roe v Wade decision was announced.

The demographic makeup of the King Animal Hospital staff reflected that of the veterinary profession at large. Eighty percent of the workforce were women. As was true with most veterinary clinics, the staff spent long hours working together and developing collegial relationships. It was always recommended while at work that everybody wear their “professional hats.” This way, no one was distracted by nonmedical issues while focusing on workplace duties. Unfortunately, the recent Supreme Court decision reversing the Roe v Wade directive could not escape being discussed within the workplace.

While in the break room area, 3 independent discussions among staff members became quite heated and confrontational. As would be expected with a staff of 35 people, there were going to be differences of opinions. This subject did not come under the normal description of break room banter. The weather, stories about their children, and quirky clients were usually the subjects of conversation, but not this time. For many reasons, not the least of which was that 80% of the staff were women, these discussions became very personal. Two staff members decided they were no longer comfortable working alongside certain coworkers. The hospital director saw it was time to intervene and chose to address the issue and the fallout with the staff.

The hospital director delivered a 3-pronged message to the staff. First, she let everyone know that the King Animal Hospital team was, first and foremost, obligated to help sick animals and support their owners. Furthermore, this current discord hurts their ability to provide this medical help. Second, she respected each staff member’s personal right to their opinion and feelings about this controversial subject. However, there was a time and a place to effectively express these opinions. Finally, she was willing to make staff assignment adjustments for those who felt that in good conscience, they could not effectively perform their duties with certain coworkers.

There is no doubt that with time and reflection, the acute reaction to this subject would change to a more reflective, activist mode. As for now, the hospital director felt she sent a clear message that was both sensitive to these unique times and directive for the staff to effectively return to the care of sick pets.

Do you feel the hospital director handled this situation correctly? Was she overindulgent or not direct enough? We would like to know what you think.

Rosenberg is director of Voorhees Veterinary Center in Voorhees, New Jersey. Although many of the scenarios Rosenberg describes in his column are based on real-life events, the veterinary practices, doctors, and employees described are fictional.
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