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CAUTION:

Topical Solution for the treatment and control of hookworm, roundworm and tapeworm infections in cats and kittens that are at least 8 weeks of age and weigh at least 2.2 lbs (1 kg).

DESCRIPTION:

The formulation and dosage schedule is designed to provide a minimum of 1.36 mg/lb (3 mg/kg) emodepside and 5.45 mg/lb (12 mg/kg) praziquantel based on body weight.

INDICATIONS

PROFENDER Topical Solution is indicated for the treatment and control of hookworm infections caused by Ancylostoma tubaeforme (adults, immature adults, and fourth stage larvae), roundworm infections caused by Toxocara cati (adults and fourth stage larvae), and tapeworm infections caused by Dipylidium caninum (adults) and Taenia taeniaeformis (adults) in cats.

DOSAGE AND ADMINISTRATION - IMPORTANT NOTES:

Do not apply to broken skin or if hair coat is wet. Do not get this product in the cat's mouth or eyes or allow the cat to lick the application site for one hour. Oral exposure can cause salivation and vomiting. Treatment at the base of the head will minimize the opportunity for ingestion while grooming. In households with multiple pets, keep animals separated to prevent licking of the application site.

Stiff hair, a damp appearance of the hair, or a slight powdery residue may be observed at the treatment site. These effects are temporary and do not affect the safety or effectiveness of the product.

HUMAN WARNINGS:

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

To prevent accidental ingestion of the product, children should not come in contact with the application site for twenty-four (24) hours while the product is being absorbed. Pregnant women, or women who may become pregnant, should avoid direct contact with, or wear disposable gloves when applying, this product. Studies performed in rats and rabbits suggest that emodepside may interfere with fetal development in those species.

PROFENDER Topical Solution may be irritating to skin and eyes. Reactions such as facial, tongue and hand swelling have been reported in humans in rare instances, Avoid contact with the application area while it is wet and wash hands thoroughly with soap and warm water after handling. People with known hypersensitivity to butylhydroxyanisole, emodepside or praziquantel should administer the product with caution. If the product accidentally gets into eyes, flush thoroughly with water. May be harmful if swallowed. In case of accidental ingestion or if skin or eye irritation occurs, call a poison control center or physician for treatment advice.

The Material Safety Data Sheet (MSDS) provides additional occupational safety information. For customer service or to obtain product information, including the MSDS, call 1-800-633-3796. For medical emergencies or to report an adverse reaction, call 1-800-422-9874.

Safe use of this product has not been evaluated in cats less than 8 weeks of age or weighing less than 2.2 lbs (1 kg), in cats used for breeding, during pregnancy or in lactating queens. The effectiveness of this product when used before bathing has not been evaluated.

Use with caution in sick or debilitated cats. Oral ingestion or exposure should be avoided. Use with caution in heartworm positive cats. The cats enrolled in the field study were heartworm antigen and antibody negative prior to entering the study. In a laboratory study, cats artificially infected with adult heartworms and treated with PROFENDER Topical Solution had fewer worms recovered than the placebo control group. (See ANIMAL SAFETY.)

Field study. In a controlled, double-masked field safety study, owners administered PROFENDER Topical Solution to 606 cats. Adverse reactions reported by the cat owners included licking/excessive grooming in 18 cats (3.0%), scratching treatment site in 15 cats (2.5%), salivation in 10 cats (1.7%), lethargy in 10 cats (1.7%), adopecia in 8 cats (1.3%), agitation/nervousness in 7 cats (1.2%), vomiting in 6 cats (1.0%), diarrhea in 3 cats (0.5%), eye ir ritation in 3 cats (0.5%), respiratory irritation in 1 cat (0.2%) and shaking/tremors in 1 cat (0.2%). All adverse reactions were self-limiting.

Laboratory effectiveness studies: One cat died 10 days after receiving PROFENDER Topical Solution. The necropsy showed chronic active cholangiohepatitis. While the use of the drug did not appear to be the direct cause of death, treatment with the drug cannot be ruled out as a contributing factor (See PRECAUTIONS). One cat treated with a vehicle placebo (formulation minus the active ingredients) showed salivation, gagging, lethargy and a swollen tongue.

<u>Foreign Market Experience</u>: The following adverse events were reported voluntarily during post-approval use of the product in foreign markets: application site reaction (hair loss, dermatitis, pyoderma, edema, and erythema), salivation, pruritus, lethargy, vomiting, diarrhea, dehydration, ataxia, loss of appetite, facial swelling, rear leg paresis, seizures, hyperesthesia, twitching, and death.

EFFECTIVENESS:

In a total of 13 controlled laboratory studies to establish effectiveness, 149 cats were treated with PROFENDER Topical Solution. In the field study conducted at 13 veterinary clinics/hospitals, 837 purebred or crossbred cats from single and multi-cat households were enrolled to evaluate safety and effectiveness under field conditions of use. Of those, 606 received a single treatment with PROFENDER Topical Solution. Cats ranged in age between 2 months and 17 years and weighed between 0.8 lbs (0.36 kg) and 21 lbs (9.62 kg). Data from these studies demonstrated PROFENDER Topical Solution is safe and effective for the treatment and control of hookworm infections caused by *Ancylostoma tubaeforme* (adults, immature adults, and fourth stage larvae), roundworm infections caused by *Toxocara cati* (adults and fourth stage larvae), and tapeworm infections caused by Dipylidium caninum (adults) and Taenia taeniaeformis (adults).

ANNIMAL SAFETY.

In a field study, PROFENDER Topical Solution was used in cats receiving other frequently used products including: analgesics, anti-fungals, non-steroidal anti-inflammatories, anthelmintics, antimicrobials, flea and tick products, sedatives, anesthetics, cardiac medications, anxiolytics, hormonal treatments, steroids, otic and ophthalmic preparations, and vaccines.

<u>Dose Tolerance Study in Cats</u>: PROFENDER Topical Solution was applied topically one time to young cats at 10X the recommended label use rate. Two cats salivated. Another cat exhibited tremors and lethargy. These signs were self-limiting.

Oral Safety Studies in Cats: PROFENDER Topical Solution was administered orally at the recommended topical dose to young adult cats. The cats exhibited salivation, vomiting, tremors, abnormal gait, abnormal respiration and weight loss. These signs were self-limiting.

General Safety Study in Kittens: PROFENDER Topical Solution was topically applied at 0X (vehicle control), 1X, 3X and 5X the maximum dose to 48 healthy 8-week-old kittens every two weeks for six doses. One 5X kitten experienced salivation and tremors and another 5X kitten experienced salivation on the day of dosing. A third 5X kitten experienced tremors the day after dosing. Three cats vomited within 24 hours of dosing, one each in vehicle control, 3X and 5X groups.

Safety Study in Heartworm Positive Cats; Cats artificially infected with adult heartworms harvested from dogs were treated topically with PROFENDER Topical Solution at 0X, 1X or 5X the recommended dose once a month for three treatments. Clinical signs included salivation (one 1X and three 5X cats), labored breathing (all groups) and lethargy (one 5X cat). At the study conclusion, the 1X and 5X cats had fewer live heartworms recovered than the 0X group.

Profender is protected by the following U.S. Patents: 5 514 773 and other patents pending.

Made in Germany

NADA 141-275, Approved by FDA

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January, 2010

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Trends magazine, September 2010



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AAHA Nutritional Assessment Guidelines for Dogs and Cats

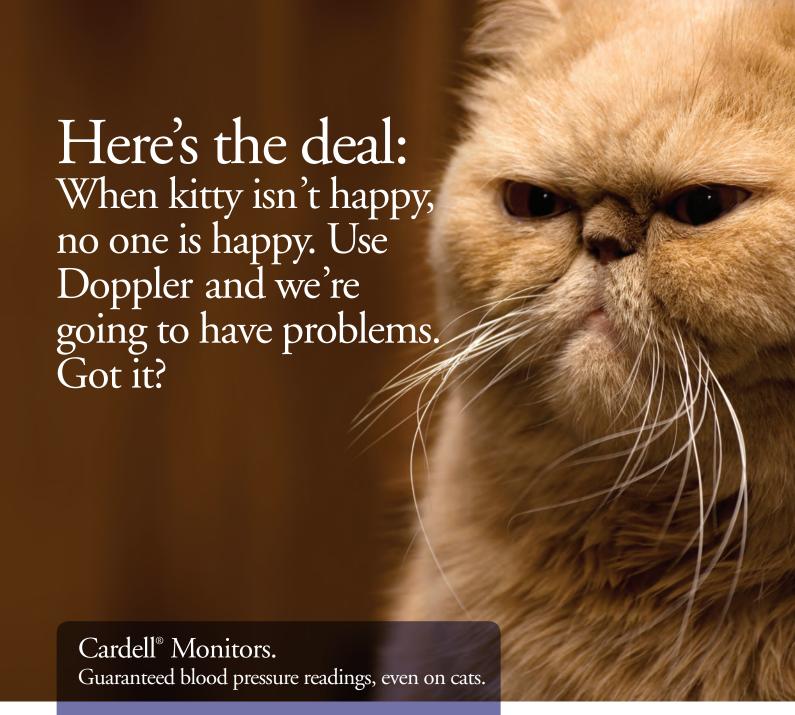
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Trends magazine, September 2010





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PLUGGED IN

Going Paperless

Two things to take your practice to the next level



LEARNING CURVE

Moving into Management

Technicians share their tips.



YOUR QUESTIONS ANSWERED

What is the best way for me to handle an angry or upset client on the telephone?

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Vol. 26, No. 6 September 2010

Trends magazine aims to provide timely perspectives on the art and business of companion animal veterinary practice to all members of the practice team.

CASE REPORTS

- Acute Megakaryoblastic Leukemia in Dogs:
 A Report of Three Cases and Review of the Literature
- Hemorrhagic Pleural Effusion Secondary to an Unusual Type III Hiatal Hernia in a 4-Year-Old Great Dane
- Diaphragmatic Support of a Thoracic Wall Defect in a Dog
- Feline Hypertrophic Osteopathy: A Collection of Seven Cases in Taiwan
- Uterine Rupture and Septic Peritonitis Following Dystocia and Assisted Delivery in a Great Dane Bitch
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EXCITING NEWS FOR JAAHA

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13 YEARS WITH MS. IZZ, 26 WELLNESS EXAMS, A BAD CASE OF EAR MITES, 1460 DAYS OF INSULIN, 2 TOOTH EXTRACTIONS AND 1 CHANCE ENCOUNTER WITH A '97 HONDA.

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view from AAHA

Communication: an essential clinical skill

by Michael Cavanaugh, DVM, DABVP



veryone is an expert at communication, right? I have looked at hundreds, if not thousands, of resumes, and I do not recall ever seeing one that did not mention "excellent communication skills."

It makes sense, doesn't it, because we have been communicating in one form or another since birth? However, although we develop communication styles that are quite personal, it does not guarantee we are always effective communicators.

Remember the last time you spoke with a disgruntled client or a time when you were a disgruntled customer of a business. Was communication involved — miscommunication, lack of communication or poor communication? My guess would be *yes*.

Veterinary medical communication adds a wrinkle: We typically communicate information that is second nature to us but is like a foreign language to our clients. Throw in emotions (e.g., guilt, worry, fear), and it is easy to see how the stage is set for a "perfect storm" of communication issues.

I have been fortunate to work with and learn from some of the world's experts in veterinary medical communication. Drs. Jane Shaw, Suzanne Kurtz, Cindy Adams and Kathleen Bonvicini (among others) are all working to move veterinary medical communication into the mainstream.

Medical communication in humans has been intensely studied for 35 years. Veterinary medical communication is gaining rapidly as a topic of interest, fueled by programs pioneered by these colleagues at Washington State University, Colorado State University, the University of Guelph and the University of Calgary.

Pfizer Animal Health and Bayer Animal Health have invested heavily in this

Finding common ground among the parties moves the conversation forward on a positive note.

area — Pfizer through its FRANK™ communication initiative, which helps to teach core skills to practice teams, and Bayer by training veterinary school faculty in communication skills.

If you want to see a veterinary medical communication expert bristle, call communication a *soft skill*. Research proves that communication is a clinical skill, like surgical or diagnostic skill, and can be developed through coaching and practice.

The best thing about putting effort into developing communication skills is that they transfer into all aspects of your life; you do not leave them at the office. As your skills improve, so will your interactions with clients, colleagues, employees and family.

Four core skills addressed in veterinary medical communication training include nonverbal communication, empathy statements, reflective listening and openended questions. Another great tool is the concept of *common ground*. In any difficult conversation, finding common ground among the parties moves the conversation forward on a positive note.

As veterinary professionals, we are lucky in that a pet is usually at the center of these conversations. That creates immediate common ground, because both the veterinary team and the pet owner are seeking the best outcome for the pet.

Future *Trends* articles will explore some of these skills in more depth. Until then, knowing we can improve this *clinical skill* is the first step toward improving our professional satisfaction, client satisfaction with patient care and interpersonal relationships by enhancing our communication skills.

1. Shaw JR. Four core communication skills of highly effective practitioners. *Vet Clin North Am Small Anim Pract* 2006;36:385–396.

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speakout

Young manager leads practice to stellar success

After reading your feature article profiling young practice managers, I feel your publication would do well to spread the word regarding the impressive achievements of Laura Dean, chief operating officer and co-owner of the Veterinary Emergency Center (VEC) in Richmond, Va.

Her ambitions and vision are an inspiration to her staff, and her achievements are notable not just because of her age but because of their magnitude.

Laura rose from client service representative to director of public relations to practice manager to chief operations officer and now part owner of the VEC, all by age 30. During her undergraduate studies at Virginia Commonwealth University, she started working as a client service representative part-time.

After graduating with her degree in mass communications, she went on to pursue a career as a marketing manager for a large tax service. Between her stints traveling around the country, helping franchisees grow their brand, she would stop in to help with a shift here and there at the hospital.

Laura loved the VEC and wanted to find a way to develop that passion into a career. Realizing that the hospital had little to no public relations or marketing strategies in place, she put together a

Hire a practice manager? Proceed with caution!

Owners must be careful of those in charge. In the end, it is your fault for whatever happens.

Question: Do practice managers have the skills to do the job, even with a narrow job description?

I feel that the Veterinary Hospital Managers Association has minimal requirements that could lead to maximum risk.... Is a person to be an office manager (most human resource [HR] problems), a hospital manager or a hospital administrator (very few of these)?

I believe the majority of DVMs would be better off with a manager who has the authority to make a profit. The owners and the manager need to work out the direction, vision and culture of the hospital. They may need an outside third party and some personality testing. Financial goals can follow proven percentages, because set guidelines, practice goals and ethics questions can be more elusive (e.g., euthanasia, adoptions, abandonments, declaws, ears and tails).

A full team may be the same as a financial planner would use: owners, managers, accountant, lawyer, banker, insurance agent, broker and consultant.

Trust is earned over time; performance and results will determine if more duties are offered. Goals and objectives

continued on page 12

continued on page 73

CORRECTION

Because of vendor error, two machines in the "Commercial Washing Machines Buyer's Guide" (March 2010) should be omitted. They are TrueBalance Front Load Washer models WM2701HV and WM2801. Both machines are manufactured by LG Electronics. These are domestic machines, and the company will not confirm that the warranty applies to the machines if used for a commercial purpose.

Trends online (www.trends.aahanet.org) has been corrected to omit these machines from the Buyer's Guide tables.

speakout

comprehensive proposal on the growth potential that the clinic had through marketing and branding.

At that time (2003), marketing an emergency hospital was almost considered a radical move. Armed with budgets, storyboards, literature, measurement analyses and booklets on herself, Laura went to the majority owner for 1 hour a day, 3 days a week, for over 3 months to instill in him an understanding of the need for promotions and someone (herself, of course) to lead the course.

He allowed her to pick her title, salary and job description, with the understanding that if it did not have a measurable value, she would need to pack her bags.

As director of public relations, Laura grew the gross revenues an average of over 15% over those of previous years for the next 2 years and needed a new challenge.

Once again, she approached the majority owner with her intentions of becoming the practice manager. After another series of proposals, he approved her request, making Laura the VEC's practice manager at the age of 26.

Over the next 5 years, Laura oversaw the organization through a merger and assisted with opening an additional sister practice, the expansion and construction of two hospitals, the development of a successful culture, and the growth from an emergency center to 24-hour critical care and specialty hospital, with successful recruitment of specialists in critical care, internal medicine, oncology and radiology, while developing and growing relationships with affiliated specialists in ophthalmology, dermatology, cardiology and surgery.

Laura's implementation of a strong and successful management structure was a particular challenge in an environment of male DVM exclusive ownership and oversight.

There had never been a management structure in place before Laura began to

realize her vision for the VEC, and her leadership and vision helped her to succeed despite discouragement and challenges from her contemporaries within the business.

As her title developed into chief operations officer, she successfully managed the hospital through the tough economic downturn and created a management structure based on teams and committees, fostering a higher level of commitment from all staff.

Applying her first-hand knowledge as well as that learned through her



Laura Dean

education and completion of the management program at the Veterinary Management Institute of Purdue University, she began lecturing at national conferences and providing consultation services for numer-

ous other emergency and specialty hospitals around the country.

By the age of 30, she proposed and was accepted into partnership at the VEC, thus becoming the youngest and only female non-DVM with ownership in the practice.

We are all proud of and indebted to Laura for her inspiration and the excellence of our business.

Her role in the creation of a strong positive leadership structure for our organization helped to create one of the best veterinary work environments in existence.

P.S. The VEC has been AAHA-accredited for many years, and our involvement in AAHA is a proud achievement.

Nathan Tersteeg, HR manager,
 Veterinary Emergency Center,
 Richmond, Va.



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² Day MJ, Schoon H-A, Magnol J-P, et al: A kinetic study of histopathological changes in the subcutis of cats injected with non-adjuvanted and adjuvanted multi-component vaccines. Vaccine 25:4073-4084, 2007.

³ Data on file with Merial.

4 Greene CE, Schultz RD: Chapter 100 Immunoprophylaxis, in Greene CE (Ed.): Infectious Diseases of the Dog and Cat, 3rd ed. Philladelphia, Saunders Elsevier, 2006, p 1073.





Veterinarian brings her classroom to the clinic

When Country Hills Animal Clinic of Torrance, Calif., was preparing for its AAHA accreditation review in January, owner Jennifer Cassidy, DVM, saw an opportunity to raise the bar even higher.

"We already had a good training program in place, but we realized we could make it even better," she says.

Cassidy, who also teaches veterinary assistant classes at a nearby vocational school, decided to adapt her teaching materials to provide monthly in-house training for her staff.

"Our practice only has one registered veterinary technician," she explains, "which is pretty typical for our area. Most of our staff members are veterinary assistants without a lot of traditional training.

"They have good skills and can perform tasks very well. But they don't understand the why behind these tasks. Why is it important that your pulse oxygen level is 98% or higher and why is it bad if it's 95%? And what does that mean for the animal?

"If they understand the why of things, they're better able to recognize problems before they become too serious," she explained.

Once each month, Cassidy forwards all calls to the answering machine and her team of 20 staff members spends the lunch hour learning about anesthesiology, cardiology, imaging and disease processes.

"I let the staff choose the topic, and I try to keep it lively by using PowerPoint charts and photos," she says. "We get everyone involved, from our receptionist to our kennel attendant.

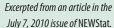
"Providing CE for that many employees can be expensive, especially in today's economy," Cassidy says. "Unlike registered veterinary technicians, our veterinary assistants don't have required CE to keep their licensing up to date. This is a fun and cost-effective way to see that they get the training they need. It makes their job experience more enjoyable, and our patients get even better care too."

Health care deadline looms

eginning this month, under the Affordable Care Act, insurance plans and issuers that offer dependent coverage must offer coverage to enrollees' adult children until the age of 26, even if a young adult no longer lives with his or her parents, is not listed as a dependent on a parent's tax return or is no longer a student.

The new law applies to plan or policy years beginning on or after Sept. 23, 2010.

For more information, go to www.hhs.gov/ociio/regulations/adult_ child_fact_sheet.html.







"OSHA is here!"

Have you heard the one about government safety inspectors targeting veterinary practices? Do you fear hefty fines for infractions you do not know about?

The Occupational Safety and Health Administration (OSHA) is here to help — without cost or penalty.

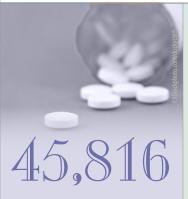
Really!

OSHA offers a free service to help small-business owners improve occupational safety and health management. The service includes a consultation and site visit to identify potential hazards and areas that can be improved.

Site visit? Hazards? Relax. This service is separate from OSHA's inspection effort. There is no risk:
No citations are issued or penalties proposed. Your only obligation is to correct serious hazards that the consultant finds.

There is just one catch: The service is offered only on request.

To learn more or to schedule a consult, visit OSHA's website at www.osha.gov.



The number of calls to the American Society for the Prevention of Cruelty to Animals' Animal Poison Control Center last year that involved human medications.

This topped the center's list of the most common pet hazards, followed by 29,020 calls concerning insecticides.

Chat, read, tinker, search, think

Posted to Trends online August 27, 2010

he first week of September is Self-University week. Use these tips to teach yourself something new this month. And remember, when it comes to learning, it's always better late than never.

- Study the nature of your career, occupation or the means with which you earn a living and make some predictions about the future of that enterprise.
- If you are a worker, read a book about management; if you are a

- manager, read a book written from the perspective of workers.
- Take the time to master that piece of high-tech equipment that you dread the most. Read the instruction manual.
- If you work in a large company or organization, pay a visit each day to someone you barely know, in another department, for instance.
 Get better acquainted with these people; find out more about their work and how it relates to your own.
- Reread a book you thought was difficult or "over your head" the first time you tried it.
- Search a large computer database using your favorite subjects as key words. (Google doesn't count. Go to



a large public library's website and use a database you have never used before. From the New York Public Library, here's one set of databases to explore: http://tinyurl.com/2foda2x.)

Tips adapted from www.autodidactic.com/ resources/selfweek.htm.

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Nice *and* tough: A winning combination for leaders

ccording to a Global Workforce
Study conducted by Towers
Watson, a worldwide professional services company, employees
increasingly value leaders who connect
with workers on an emotional level.

"Given the state of affairs in many businesses over the last year, perhaps it shouldn't come as a surprise that trustworthiness tops the list of desired senior leadership qualities," said Tower Watson's Max Caldwell.

"This craving for the more 'emotionally intelligent' aspects of leadership indicates that many employees feel disconnected from their organization and are looking for their leaders to project integrity and empathy and continue to focus on the development of employees."

However, there is more to being a good chief executive officer (CEO) than connecting with employees, treating people with respect and being a good listener. Indeed, too much emphasis on "being nice" may get in the way of a leader's success.

That is according to new research by Steven Kaplan, a professor at the University of Chicago's Booth School of Business.

His study examined 40 personal attributes, including leadership, intellect, integrity and interpersonal skills.

Kaplan found that aggressive leaders — those who were persistent and proactive — were most likely to succeed.

On the other hand, there was no link solely between interpersonal skills and business success. In fact, CEOs who scored highest on listening skills were less successful than those who did not.

"I'm not surprised [by these results]," says Carin Smith, DVM, a veterinary consultant who specializes in leadership and organizational development. "We might wish for a CEO who is nice, but what is rewarded is something else: getting stuff done and the bottom line.

"Now, the real successful leader would be that rare person who could deliver on all counts," she said.



Trends magazine, September 2010







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New Fuzzy Ears
New Curious Sniffs

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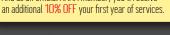
Our fully managed program let's you focus on your practice while we do all the work, and does not require a long-term commitment. So get your practice *purring* with new business with the most cost-effective and convenient way on the market – *Imtek's New Mover Mail Program*.





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notebook

Veterinarian strives to shut down raucous music at teen club

Imagine operating your practice next to a club that blasts heavy metal music from 7 p.m. to 11 p.m. every day.

Jeff Valentini, DVM, owner of the Family Pet Clinic, a small practice in a strip mall in Tinley Park, Ill., is battling to shut down a teen club that recently converted its format to the raucous music.

"I can't continue doing what I love to do best, which is taking care of area pets," Valentini is quoted in the *Triblocal*. com Reporter. "The noise is so loud, and I have sick pets that are disturbed by the noise."

When pleading his case to local officials, he cited a dog with a ruptured disk that was unable to sleep after surgery.

The town's mayor and police commander are sympathetic to Valentini's plight and are applying pressure on the club's owners.

Valentini, described as a "former metal-head," said he believes the club should operate in a free-standing building rather than a strip mall.



Quote of the month

No family wants to subject its already sick pet to uncomfortable tests or dump thousands of dollars into deadend diagnostics. So, why do we do that to our (dying) grandparents?

"Clearly, the stakes are different:
We are talking about the people who
brought us into the world....I'm
not advocating that people and their
families be allowed to dictate their care
entirely. However, there is something

to be said for inviting them deeper into the process.

"In some ways, veterinary practice today is not that different from the practice of human medicine before insurance companies dictated policy and the threat of lawsuits guided decisions.

— Karen Oberthaler, VMD, New York City Veterinary Specialists, Newsweek Magazine, March 22, 2010

Trends magazine, September 2010

Put the kibosh on office gossip

n 2007, a few gossiping employees were making life miserable for the rest of the staff at Raintree Animal Hospital in Ft. Collins, Colo.

"Gossip creates a toxic work environment and lowers morale for the entire team," says Nichole Kelly, CVT, CVPM, Raintree Animal Hospital's practice manager. "We spend more time with coworkers than we do with friends and family, so it's important we respect and enjoy each other's company."

So, Kelly instituted an anti-gossip policy.

"Our policy is that we have zero tolerance for gossip," she says. "Employee conflict must be handled in a mature and professional manner."

The first step at Raintree Animal Hospital is for the individual to discuss the problem directly with the other person or persons involved.

"We have generally found that there was a misunderstanding and it can be easily resolved at this level.

"If a person comes to a supervisor with an employee issue, that person is asked if he or she tried to resolve the problem on his or her own first," Kelly says. "He or she is also asked to come up with two reasonable solutions to the problem.

"If the issue cannot be resolved between the coworkers, a supervisor gets involved as a mediator with all the employees until a solution is reached and is clearly defined," she explains.

The penalty can range from a series of warnings to suspension without pay,



standing in the same room, then you probably shouldn't be saying it."

Botched confrontations may damage the work environment as much as gossip does. So, if your policy, like Kelly's, requires face-to-face confrontation in place of gossip, help employees learn to do that well.

Be sure the policy includes guidelines or a simple protocol for staff to use when they are initiating *and* responding to a complaint. Teach basic negotiating skills like those explained in the longtime best-seller *Getting to Yes* by Roger Fisher and Richard Ury.

Mentor and coach employees

to build up the courage to initiate a constructive confrontation, and prepare them to deal with the discomfort and consequences afterward.

Encourage employees to talk about their successes in team meetings, and reward them with congratulations and a round of applause.

Above all, be consistent.

"Don't implement a policy if you're not prepared to follow through with it," she cautions. "You may have good intentions, but your team could end up resenting the entire concept if no follow-through action is taken."

Photo galleries attract clients

Online photo galleries can attract new clients to your practice.

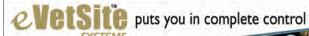
"Once we post [a client's] photo on a website, the person who submits his or her pet to the gallery calls everyone they've ever known on the planet and says, 'Look at Fluffy on my veterinarian's website," says Kendra Ryan, PhD, chief executive officer of Vet Web Designers, which specializes in veterinary websites.

"I can't tell you how many doctors have told us, 'This has generated more new business for us. We didn't see it coming, but it's a great idea,'" she said.

An easy way to create a pet photo gallery is to use Flickr. Post a link to the gallery on your website. Code the link so that it opens in a new window "on top of" your website. That way, when visitors finish looking at the photos and close the Flickr page, your clinic's webpage will still appear on their screen.

How: To get a link to open in a new browser window, add target="_blank" to your link tag. For more detail, go to http://www.fontstuff.com/frontpage/fptut05.htm.





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Action

notebook

CE CALENDAR

SEPTEMBER

September 9, 2010

AAHA Nutritional Assessment Guidelines: What They Mean to You Live Web conference

September 23, 2010

Taking Action With the Nutritional **Assessment Guidelines** Live Web conference

OCTOBER

October 4-17

Tough Talk: Communicating Nutrition With Difficult and Not-So-Difficult Clients On-demand Webcast

October 19

Nutrifluent: Speak the Clients' Language and Have Them Eating Out of Your Hand* Denver, Colo.

October 21-24

Veterinary Management Institute (VMI) Human Resources Module, Series 21 West Lafayette, Ind.

October 28

Nutrifluent: Speak the Clients' Language and Have Them Eating Out of Your Hand* St. Louis, Mo.

NOVEMBER

November 9

Nutrifluent: Speak the Clients' Language and Have Them Eating Out of Your Hand* Vancouver, B.C.

November 10-11

MSAA/AAHA Meeting Davenport, Iowa

November 11

Nutrifluent: Speak the Clients' Language and Have Them Eating Out of Your Hand* Portland, Ore.

November 18-21

Veterinary Management Institute (VMI) Marketing Management Module, Series 20 West Lafayette, Ind.

Free CF from the AAHA archive

The following conferences are available in the AAHA archive. Association members and event registrants may access the archive for free. For help, contact AAHA's Member Service Center at 800-883-6301 or go to www.aahanet.org/webconf.

Microchipping Works: **Best Practices**

Available until Oct. 29, 2010

Managing Separation Anxiety: An Evidence-Based Approach

Available until Nov. 20, 2010

Vetsulin Update: Insulin Transitioning for Diabetic Patients Available until Nov. 24, 2010

Compliance: What We Know Now — Tips & Best Practices from the Field Available until Jan. 28, 2011

Advances in Soft Tissue Surgery:

Vessel Sealing

Available until Feb. 16, 2011

"Doc, Please Make My Dog Stop Scratching!"

Available until Apr. 6, 2011

Trends magazine, September 2010

^{*} An AAHA Workshop in Collaboration with Hill's Pet Nutrition

AAHA honors senior students

ach year, AAHA honors exceptional senior veterinary students with the AAHA Student Program Senior Student Award. The award is presented in recognition of outstanding clinical proficiency in small-animal medicine and surgery.

Honorees receive 5 years of free AAHA membership, including subscriptions to the *Journal of the American Animal Hospital Association* and *Trends magazine*, as well as 5 years of free registration for the AAHA yearly conference.

The honorees for 2010 are as follows:

Nolan Golding, Atlantic Veterinary College David Upchurch, Auburn University Kendon Kuo, University of California—Davis Nicola Council, Colorado State University Rosphorn Busayawatanasood, Cornell University

Christine Ross, University of Florida Sara Hashway, University of Georgia Vlad Stefanescu, University of Guelph Andrew Sheridan, University of Illinois Mary England, Iowa State University Yaicha Peters, Kansas State University Shana Klein, Louisiana State University William Berkowski, Michigan State University Shannon Poole, University of Minnesota Ashley Buchta Detwiler, Mississippi

Jill Nelson, University of Missouri Cristian Petra Tuqui, University of

State University

Montreal

Joan Hunt, North Carolina State University

Nicole Stec, Oklahoma State University
Robin Sechrest, Oregon State University
Meghan Hall, Ohio State University

Katherine Parker, University of Pennsylvania

Leah Ferguson, Purdue University Lisa Hann, Saint George's University Lee Crumpler (will graduate in December 2010), Saint George's University

Lindsay Kurach, University of Saskatchewan

Meredith Westling, University of Tennessee

Amanda Taylor, Texas A&M University

Bari Morris, Tufts University

Lauren Sheldon, Tuskegee University

Jenna Harman, Virginia Tech/University of Maryland

Brian Michael Geesaman, Western University

Constance Fazio, University of Wisconsin Anna George, Washington State University





URL: http://trends.aahanet.org

News, research, insights and tips to boost your productivity, profitability and professional satisfaction.

Social media tips

Posted August 2, 2010

Learn basic do's and don'ts, for example: The trick to getting the most out of tools such as Facebook and Twitter is to "listen, add value and be responsive."

Bees battle MRSA

Posted June 28 2010

Bees could be an important factor in the fight against methicillinresistant *Staphylococcus aureus* (MRSA), according to new research from at the University of Strathclyde in Glasgow, Scotland.

Researchers showed that propolis, also known as bee glue, displayed "anti-MRSA activity."



What would you change?

Posted August 9, 2010

Trends asked several thought leaders: What would you change about the profession? They had plenty to say.

Read the article in October's *Trends magazine*.

Meanwhile, voice your own opinion here.

VIDEO

Change becomes you

Posted July 1, 2010

In four brief videos, *Trends*Executive Edge speaker Karen
Szymanski, PhD, discusses change
and how it affects us — and how
we can manage it, rather than let
it manage us.



Most UK dogs are fat

Posted July 29, 2010

Six out of 10 dogs in the United Kingdom are overweight, according to a study from the University of Glasgow.

Win with commercial real estate

Posted June 14, 2010

This preview of a forthcoming *Trends* article by professors at Pepperdine University's Graziadio School of Business and Management, explains how business owners can benefit from owner-occupied, single-tenant commercial real estate, and offers practical advice on how to get started on this potentially

Read the full articles at www.trends.aahanet.org





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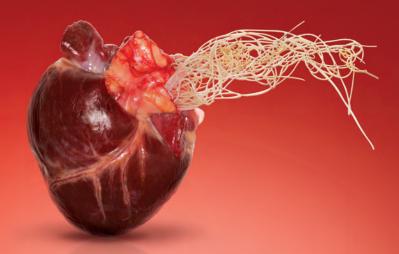












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Important Safety Information:

HEARTGARD® is well tolerated. All dogs should be tested for heartworm infection before starting a preventive program. Following the use of HEARTGARD, digestive and neurological side effects have rarely been reported. For more information, please visit **www.HEARTGARD.com.**













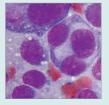
www.aahanet.org





VETERINARY ARTICLES

- Evaluation of the Clinical Efficacy of Pradofloxacin Tablets for the Treatment of Canine Pyoderma
- Chylothorax Treated Via Thoracic Duct Ligation and Omentalization
- Use of Propentofylline in Feline Bronchial Disease: Prospective, Randomized, Positive-Controlled Study



CASE REPORTS

- Acute Megakaryoblastic Leukemia in Dogs: A Report of Three Cases and Review of the Literature
- Hemorrhagic Pleural Effusion Secondary to an Unusual Type III Hiatal Hernia in a 4-Year-Old Great Dane
- Diaphragmatic Support of a Thoracic Wall Defect in a Dog
 - Feline Hypertrophic Osteopathy: A Collection of Seven Cases in Taiwan
 - Uterine Rupture and Septic Peritonitis Following Dystocia and Assisted Delivery in a Great Dane Bitch
- 1
- Porcine Small Intestinal Submucosa Augmentation Urethroplasty and Balloon Dilatation of a Urethral Stricture Secondary to Inadvertent Prostatectomy in a Dog
- Aortic Body Tumor in Full-Sibling English Bulldogs

EXCITING NEWS FOR JAAHA



CHEWABLES

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

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

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

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

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

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

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

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

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

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

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

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

ACCEPTABILITY: In acceptability and field trials, HEARTGARD Plus Chewables were shown to be an acceptable oral dosage form that was consumed at first offering by the rajority of dogs. PRECAUTIONS: All dogs should be tested for existing heartworm infection before starting treatment with HEARTGARD Plus which is not effective against adult D. immitis. Infected dogs must be treated to remove adult heartworms and microfilariae before initiating a program with HEARTGARD Plus.

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

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

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

Store at controlled room temperature of $68^\circ F$ - $77^\circ F$ ($20^\circ C$ - $25^\circ C$). Excursions between $59^\circ F$ - $86^\circ F$ ($15^\circ C$ - $30^\circ C$) are permitted. Protect product from light.

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

staggering, convulsions and hypersalivation.

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

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

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

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

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

Of dogs showing a preference in three studies conducted by independent investigators, dogs preferred HEARTGARD* (ivermectin) Chewables over INTERCEPTOR* (milbemycin oxime) FlavorTabs* by a margin of 37 to 1; data on file at Merial.

² Data on file at Merial.

³ HEARTGARD Tablets Freedom of Information Summaries 1987.



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JOURNAL OF THE AMERICAN ANIMAL HOSPITAL ASSOCIATION / www.aahanet.org

Case No.	Breed	Sex	Age (y)	Weight (kg)
1	Newfoundland	М	8	51
2	Australian cattle dog	FS	4	26

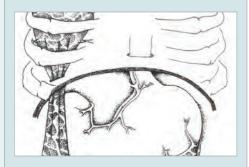
SOFT TISSUE SURGERY

Evaluation of the Clinical Efficacy of Pradofloxacin Tablets for the Treatment of Canine Pyoderma

C Restrepo, PJ Ihrke, SD White, IB Spiegel, VK Affolter

ORIGINAL STUDY

A third-generation fluoroguinolone, pradofloxacin (PRA), is currently being developed to treat bacterial infections in dogs. The purpose of this study was to assess the clinical efficacy in 20 dogs affected with superficial and deep pyoderma. An initial aerobic skin culture was performed in dogs with superficial pyoderma; aerobic/ anaerobic tissue culture was performed in dogs with deep pyoderma; and skin cytology and biopsies were obtained from all dogs. Pradofloxacin (approximately 3 mg/kg per os [PO]) was administered daily to all dogs. Clinical efficacy was recorded at 4 weeks for dogs with superficial pyoderma and at 3 and 6 weeks for dogs with deep pyoderma. At a mean dosage of 3.7 mg/kg PO once daily, PRA treatment resulted in an excellent to good clinical response within 3 to 6 weeks for all 20 dogs with superficial and deep pyoderma.



SOFT TISSUE SURGERY

Chylothorax Treated Via Thoracic Duct Ligation and Omentalization

K Stewart, S Padgett

RETROSPECTIVE STUDY

Chylothorax is an uncommon, potentially life-threatening disease of dogs and cats. Medical records of 12 animals (five dogs and seven cats) undergoing surgical management of chylothorax from 2001 to 2005 were reviewed. All animals received thoracic duct ligation and thoracic omentalization. In some cases, a combination of subtotal pericardectomy and/or pleural stripping was also employed. All animals survived surgery, and none was lost to follow-up. Median survival time for cats was 209 days (range 2 to 1328 days), and for dogs it was 211 days (range 7 to 991 days). Although postoperative mortality was higher than in other recent studies, no complications could be directly attributed to thoracic omentalization. A controlled, prospective study is needed to compare outcomes of this management method to those of other methods.

For the full text of these reports and studies, log on to www.aahanet.org

Findings on Auscultation

- 0 = Normal breath sounds
- 1 = Increased inspiratory breath sounds
- 2 = Mixed (inspiratory and expiratory) increased breath sounds
- 3 = Low-grade expiratory increased breath sounds
- 4 = Medium-grade expiratory increased breath

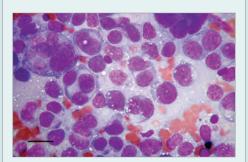
INTERNAL MEDICINE

Use of Propentofylline in Feline Bronchial Disease: Prospective, Randomized, Positive-Controlled Study

U Stursberg, I Zenker, S Hecht, K Hartmann, BS Schulz

ORIGINAL STUDY

Propentofylline is a methylxanthine derivative with bronchodilating actions similar to those of theophylline. Nineteen cats with bronchial disease were enrolled in this study. All cats received a low dose of prednisolone; 10 of the cats additionally received propentofylline. Propentofylline-treated cats significantly improved in their auscultation scores, respiratory pattern scores, and radiological bronchial markings score over the observation period, and they coughed less and slept less at the end of the study. No significant changes were noted in the control group. This study provides evidence that a combination therapy with prednisolone and propentofylline in cats with bronchial disease might be superior over monotherapy with prednisolone.



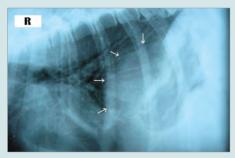
CLINICAL PATHOLOGY

Acute Megakaryoblastic Leukemia in Dogs: A Report of Three Cases and Review of the Literature

S Comazzi, ME Gelain, U Bonfanti, P Roccabianca

CASE REPORT

Three dogs of different breeds, ages, and genders were presented with pale mucous membranes, depression, anorexia, and splenomegaly. Observed were severe normocytic, normochromic, nonregenerative anemia, thrombocytopenia, and leukopenia. Blood smears contained large, atypical cells with blue vacuolated cytoplasm, cytoplasmic blebs, round to oval central nuclei, and elevated numbers of cytoplasmic fragment resembling macroplatelets. Bi- and multinucleated atypical cells were found mainly in spleen, lymph nodes, and bone marrow. A final diagnosis of acute megakaryoblastic leukemia (AMegL) was made based on morphology and positivity to the megakaryocyte-derived cell-specific markers von Willebrand factor and CD61. In case nos. 1 and 2, no treatment was initiated, and the dogs died on days 4 and 3, respectively. Case no. 3 received supportive therapy with prednisone, and after a brief improvement the dog died spontaneously 35 days after initial presentation. Only 11 cases of AMegL have been reported in dogs, and the specific diagnostic criteria have not been well established. The presence of vacuolization, cytoplasmic blebs, central round nuclei, cytoplasmic fragments, and multinucleated cells in these three cases were considered useful to differentiate AMegL from other hematopoietic neoplasms.



GASTROENTEROLOGY

Hemorrhagic Pleural Effusion Secondary to an Unusual Type III Hiatal Hernia in a 4-Year-Old Great Dane

LC Gordon, EJ Friend, MH Hamilton

CASE REPORT

An unusual case of combined axial and paraesophageal (type III) hiatal hernia (HH) in a 4-year-old Great Dane is reported. The main presenting complaint was dyspnea, and no history of trauma was present. A tentative diagnosis of HH with secondary pleural effusion was made based on clinical signs and radiographic findings. Exploratory celiotomy revealed herniation of the gastric cardia, fundus, and body through the esophageal hiatus and an adjacent, distinct defect in the diaphragm. Rupture of the short gastric vessels lead to the formation of a hemorrhagic pleural effusion that impaired ventilation. The esophageal hiatus was surgically reduced in size, and the second defect was closed with nonabsorbable sutures. Esophagopexy and tube gastropexy procedures were also performed. The dog was clinically normal 9 months postoperatively. This type of HH is not currently defined within the traditional classification system and to the authors' knowledge has not been previously reported.

For the full text of these reports and studies, log on to www.aahanet.org



SOFT TISSUE SURGERY

Diaphragmatic Support of a Thoracic Wall Defect in a Dog

A Hall, M Dujowich, DF Merkley

CASE REPORT

A large, caudal thoracic mass was removed along with ribs 11 and 12, resulting in an approximate 16 x 14-cm, caudal thoracic wall defect in a dog. The diaphragmatic musculature was mobilized and used to support the thoracic wall defect. To our knowledge, this method of thoracic wall repair has not been previously reported. This procedure allowed for airtight closure of the thoracic cavity, provided physical support, eliminated the need for muscle flaps or commercially available meshes, and provided a good cosmetic appearance without negatively affecting the dog's athletic performance.



EMERGENCY AND CRITICAL CARE

Feline Hypertrophic Osteopathy: A Collection of Seven Cases in Taiwan

CH Huang, CR Jeng, CT Lin, LS Yeh

CASE REPORT

Between October 2003 and May 2004, seven cats were diagnosed with severe and extensive hypertrophic osteopathy of the appendicular skeleton without detectable underlying causes. All cats showed similar clinical signs of pain with progressive lameness of the limbs. One cat died shortly after presentation, whereas conditions of the others resolved after medical treatment and a change in diet. Regression of the bone lesions was observed radiographically in all surviving six cases.



EMERGENCY AND CRITICAL CARE

Uterine Rupture and Septic Peritonitis Following Dystocia and Assisted Delivery in a Great Dane Bitch

KR Humm, SE Adamantos, L Benigni, EA Armitage-Chan, DJ Brockman, DL Chan

CASE REPORT

A Great Dane bitch was treated for presumed primary uterine inertia with repeated doses of oxytocin and manually assisted whelping. She was diagnosed with uterine rupture and septic peritonitis the following day. The uterine rupture is hypothesized to have occurred as a result of the management strategy used to treat dystocia. The dog underwent ovariohysterectomy, and the septic peritonitis was managed with open peritoneal drainage. The dog recovered well and was discharged 5 days later. No previous reports of canine uterine rupture associated with manual intervention appear to have been published. This report highlights the potential dangers involved in such an approach.



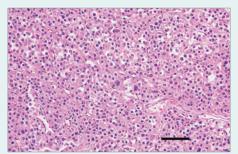
SOFT TISSUE SURGERY

Porcine Small Intestinal Submucosa Augmentation Urethroplasty and Balloon Dilatation of a Urethral Stricture Secondary to Inadvertent Prostatectomy in a Dog

MY Powers, BG Campbell, C Weisse

CASE REPORT

A 10-month-old, male German shepherd dog experienced inadvertent prostatectomy during cryptorchidectomy. Cystourethral anastomosis was performed 1 day later. The dog developed stranguria and incontinence. A proximal urethral stricture was diagnosed with a contrast urethrogram 5 weeks later. Urethral augmentation with an onlay graft of porcine small intestinal submucosa was performed. Urinary diversion was accomplished with a urethral catheter followed by a cystostomy tube. The stricture recurred over the next 6 weeks. Three urethral balloon dilatations were performed 3 days apart, with the third attempt resulting in expansion of the stricture. Twenty-two months postdilatation, the dog intermittently urinated with a steady stream and had mild to moderate urinary incontinence.



ONCOLOGY

Aortic Body Tumor in Full-Sibling English Bulldogs

TE Shaw, KR Harkin, J Nietfeld, JJ Gardner

CASE REPORT

A 10-year-old, neutered male English bulldog died acutely from respiratory distress after a short history of progressive dyspnea. Less than 2 months later, a spayed female full sibling of that dog died suddenly during a nail trim. An aortic body tumor was the cause of death in both dogs based on postmortem and histological examinations. A pheochromocytoma was also diagnosed in the neutered male. Neither dog had a history of brachycephalic airway syndrome, and the implication for a genetic predisposition toward the development of paraganglioma is discussed. This is the first case report of aortic body tumors in sibling dogs, although the condition may not be an uncommon phenomenon.

Back by popular demand, *JAAHA*'s print version will return in January 2011! One print copy of each issue will be distributed per practice, and one per individual veterinary member (not affiliated with a practice team). Both the print and online versions of the *Journal* will feature a fresh, new look.

More good news: the editorial and review team has really ramped up their efforts this year. Below are some stats to prove it:

Number of manuscript submissions per month is up:

2010: 14.85/month 2009: 11.25/month 2008: 10.75/month 2007: 6.83/month



Number of days from manuscript submission to reviewer invitation is down:

2010: 9.3 days 2009: 39.6 days 2008: 47.9 days 2007: 52.1 days

Number of reviewers invited per month is up:

2010: 73/month 2009: 46.25/month 2008: 41/month 2007: 46.75/month

Number of reviewers who have completed their reviews is up:

2010: 32/month 2009: 25.75/month 2008: 26.41/month 2007: 19.25/month

Number of days from submission to first decision is down significantly:

2010: 45.8 days 2009: 111.6 days 2008: 151.2 days 2007: 168.4 days

For the full text of these reports and studies, log on to www.aahanet.org



IT'S TIME FOR A NEW CHOICE

ProZinc® (protamine zinc recombinant human insulin), is the first FDA-approved long-acting insulin specifically for cats

Proven to deliver consistent round-the-clock glycemic control, PROZINC helps you reduce clinical signs and provide long-term management for feline diabetes patients, especially newly diagnosed or poorly regulated diabetic cats.

PROZINC insulin, like other insulin products, is not free from adverse reactions. The most common adverse reaction observed is hypoglycemia.

Try PROZINC for your feline diabetes patients, and see for yourself the difference a long-acting insulin offers for consistent glycemic control.

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ProZinc®

(protamine zinc recombinant human insulin)

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

Description: ProZinc® insulin is a sterile aqueous protamine zinc suspension of recombinant human insulin.

Each mL contains:

40 International Units (IU) recombinant human insulin protamine sulfate 0.466 mg zinc oxide 16.00 mg 3.78 mg glycerin dibasic sodium phosphate, heptahydrate phenol (added as preservative) 2.50 mg hydrochloric acid 1.63 mg water for injection (maximum) 1005 mg pH is adjusted with hydrochloric acid and/or sodium hydroxide.

Indication: ProZinc (protamine zinc recombinant human insulin) is indicated for the reduction of hyperglycemia and hyperglycemia-associated

clinical signs in cats with diabetes mellitus.

Dosage and Administration: USE OF A SYRINGE OTHER THAN A U-40 SYRINGE WILL RESULT IN INCORRECT DOSING.

FOR SUBCUTANEOUS INJECTION IN CATS ONLY.

ProZinc insulin should be mixed by gently rolling the vial prior to withdrawing each dose from the vial. Using a U-40 insulin syringe, the injection should be administered subcutaneously on the back of the neck or on the side of the cat.

Always provide the Cat Owner Information Sheet with each prescription. The initial recommended ProZinc dose is 0.1 – 0.3 IU insulin/pound of body weight (0.2 – 0.7 IU/kg) every 12 hours. The dose should be given concurrently with or right after a meal. The veterinarian should re-evaluate the cat at appropriate intervals and adjust the dose based on both clinical signs and glucose nadirs until adequate glycemic control has been attained. In the effectiveness field study, glycemic control was considered adequate if the glucose nadir from a 9-hour blood glucose curve was between 80 and 150 mg/dL and clinical signs of hyperglycemia such as polyuria, polydipsia, and weight loss were improved.

Further adjustments in the dosage may be necessary with changes in the cat's diet, body weight, or concomitant medication, or if the cat develops concurrent infection, inflammation, neoplasia, or an additional endocrine or other medical disorder.

Contraindications: ProZinc insulin is contraindicated in cats sensitive to protamine zinc recombinant human insulin or any other ingredients in the ProZinc product. ProZinc insulin is contraindicated during episodes of

Warnings: User Safety: For use in cats only. Keep out of the reach of children. Avoid contact with eyes. In case of contact, immediately flush eyes with running water for at least 15 minutes. Accidental injection may cause hypoglycemia. In case of accidental injection, seek medical attention immediately. Exposure to product may induce a local or systemic allergic reaction in sensitized individuals.

Animal Safety: Owners should be advised to observe for signs of hypoglycemia (see Cat Owner Information Sheet). Use of this product, even at established doses, has been associated with hypoglycemia. An animal with signs of hypoglycemia should be treated immediately. Glucose should be given orally or intravenously as dictated by clinical signs. Insulin should be temporarily withheld and, if indicated, the dosage adjusted.

Any change in insulin should be made cautiously and only under a veterinarian's supervision. Changes in insulin strength, manufacturer, type, species (human, animal) or method of manufacture (rDNA versus animal-source insulin) may result in the need for a change in dosage.

Appropriate diagnostic tests should be performed to rule out other endocrinopathies in diabetic cats that are difficult to regulate

Precautions: Animals presenting with severe ketoacidosis, anorexia, lethargy, and/or vomiting should be stabilized with short-acting insulin and appropriate supportive therapy until their condition is stabilized. As with all insulin products, careful patient monitoring for hypoglycemia and hyperglycemia are essential to attain and maintain adequate glycemic control and to prevent associated complications. Overdosage can result in profound hypoglycemia and death. Progestogens, certain endocrinopathies and glucocorticoids can have an antagonistic effect on insulin activity. Progestogen and glucocorticoid use should be avoided.

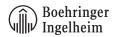
Reproductive Safety: The safety and effectiveness of ProZinc insulin in breeding, pregnant, and lactating cats has not been evaluated.

Use in Kittens: The safety and effectiveness of ProZinc insulin in kittens has not been evaluated.

Adverse Reactions: Effectiveness Field Study

In a 45-day effectiveness field study, 176 cats received ProZinc insulin. Hypoglycemia (defined as a blood glucose value of < 50 mg/dL) occurred in 71 of the cats at various times throughout the study. Clinical signs of hypoglycemia were generally mild in nature (described as lethargic, sluggish, weak, trembling, uncoordinated, groggy, glassy-eyed or dazed). In 17 cases, the veterinarian provided oral glucose supplementation or food as treatment. Most cases were not associated with clinical signs and received no treatment. One cat had a serious hypoglycemic event associated with stupor, lateral recumbency, hypothermia and seizures. All cases of hypoglycemia resolved with appropriate therapy and if needed, a dose reduction.

Three cats had injection site reactions which were described as either small, punctate, red lesions; lesions on neck; or palpable subcutaneous thickening. All injection site reactions resolved without cessation of therapy



Four cats developed diabetic neuropathy during the study as evidenced by plantigrade stance. Three cats entered the study with plantigrade stance, one of which resolved by Day 45. Four cats were diagnosed with diabetic ketoacidosis during the study. Two were euthanized due to poor response to treatment. Five other cats were euthanized during the study, one of which had hypoglycemia. Four cats had received ProZinc insulin for less than a week and were euthanized due to worsening concurrent medical conditions.

The following additional clinical observations or diagnoses were reported in cats during the effectiveness field study: vomiting, lethargy, diarrhea, cystitis/hematuria, upper respiratory infection, dry coat, hair loss, ocular discharge, abnormal vocalization, black stool, and rapid breathing.

Extended Use Field Study
Cats that completed the effectiveness study were enrolled into an extended use field study. In this study, 145 cats received ProZinc insulin for up to an additional 136 days. Adverse reactions were similar to those reported during the 45-day effectiveness study and are listed in order of decreasing frequency: vomiting, hypoglycemia, anorexia/poor appetite, diarrhea, lethargy, cystitis/hematuria, and weakness. Twenty cats had signs consistent with hypoglycemia described as: sluggish, lethargic, unsteady, wobbly, seizures, trembling, or dazed. Most of these were treated by the owner or veterinarian with oral glucose supplementation or food; others received intravenous glucose. One cat had a serious hypoglycemic event associated with seizures and blindness. The cat fully recovered after supportive therapy and finished the study. All cases of hypoglycemia resolved with appropriate therapy and if needed, a dose reduction.

Fourteen cats died or were euthanized during the extended use study. In two cases, continued use of insulin despite anorexia and signs of hypoglycemia contributed to the deaths. In one case, the owner decided not to continue therapy after a presumed episode of hypoglycemia. The rest were due to concurrent medical conditions or worsening of the diabetes mellitus.

To report suspected adverse reactions, or to obtain a copy of the Material Safety Data Sheet (MSDS), call 1-866-638-2226.

Information for Cat Owners: Please refer to the Cat Owner Information Sheet for more information about ProZinc insulin. ProZinc insulin, like other insulin products, is not free from adverse reactions. Owners should be advised of the potential for adverse reactions and be informed of the associated clinical signs. Potential adverse reactions include: hypoglycemia, insulin antagonism/resistance, rapid insulin metabolism, insulin-induced hyperglycemia (Somogyi Effect), and local or systemic reactions. The most common adverse reaction observed is hypoglycemia. Signs may include: weakness, depression, behavioral changes, muscle twitching, and anxiety. In severe cases of hypoglycemia, seizures and coma can occur. Hypoglycemia can be fatal if an affected cat does not receive prompt treatment. Appropriate veterinary monitoring of blood glucose, adjustment of insulin dose and regimen as needed, and stabilization of diet and activity help minimize the risk of hypoglycemic episodes. The attending veterinarian should evaluate other adverse reactions on a case-by-case basis to determine if an adjustment in therapy is appropriate, or if alternative therapy should be considered

Effectiveness: A total of 187 client-owned cats were enrolled in a 45-day field study, with 176 receiving ProZinc insulin. One hundred and fifty-one cats were included in the effectiveness analysis. The patients included various purebred and mixed breed cats ranging in age from 3 to 19 years and in weight from 4.6 to 20.8 pounds. Of the cats included in the effectiveness analysis, 101 were castrated males, 49 were spayed females, and 1 was an

Cats were started on ProZinc insulin at a dose of 0.1-0.3 IU/lb (0.2-0.7 IU/kg) twice daily. Cats were evaluated at 7, 14, 30, and 45 days after initiation of therapy and the dose was adjusted based on clinical signs and results of 9-hour blood glucose curves on Days 7, 14, and 30.

Effectiveness was based on successful control of diabetes which was defined as improvement in at least one blood glucose variable (glucose curve mean, nadir, or fructosamine) and at least one clinical sign (polyuria, polydipsia, or body weight). Based on this definition, 115 of 151 cases (76.2%) were considered successful. Blood glucose curve means decreased from 415.3 mg/dL on Day 0 to 203.2 mg/dL by Day 45 and the mean blood glucose nadir decreased from 407.9 mg/dL on Day 0 to 142.4 mg/dL on Day 45. Mean fructosamine values decreased from 505.9 µmol/L on Day 0 to 380.7 μmol/L on Day 45.

Cats that completed the effectiveness study were enrolled in an extended use field study. The mean fructosamine value was 342.0 μ mol/L after a total of 181 days of ProZinc therapy.

How Supplied: ProZinc insulin is supplied as a sterile injectable suspension in 10 mL multidose vials. Each mL of ProZinc product contains 40 IU recombinant human insulin.

Storage Conditions: Store in an upright position under refrigeration at 36-46°F (2-8°C). Do not freeze. Protect from light.

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

Manufactured by:

AAIPharma Services Corp., Charleston, SC 29405

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Fight Back Against Thieves

"She was attractive, personable, an ex-airline stewardess."

Everyone suspects it, few can prove it. Here's how to catch a thief — and what to do next.

by Kim Fernandez

rika Gray, CVT, clinic manager of Wiseman Animal Hospital in Tucson, Ariz., thought it was a bit strange when a client — a friend of another clinic employee — left a blank check for clinic staff to fill in after her two dogs were spayed.

Uneasily, she told the employee to fill in the check for the invoice amount and include it in the day's deposits. During routine end-of-day procedures 24 hours later, she went back to double check the final payment amount.

"I realized that the check had been made out for about \$400 less than the invoice amount," she says, a year later. "I looked at the check, looked at the invoice and decided to sit down with my boss."

The employee's explanation just didn't add up, and Gray started looking further back through the books. What she found was shocking. The 8-year employee had been deleting friends' invoices for quite some time, giving them free treatment and stealing from the veterinary hospital. Gray estimates the woman had deleted about \$6,000 in charges over 2 years.

She wasn't just anyone off the street, either. "One of the owners had babysat her when she was little," Gray says. "They'd known each other forever. We trusted her. She did deposits at the bank and she cashed checks for us and everything."

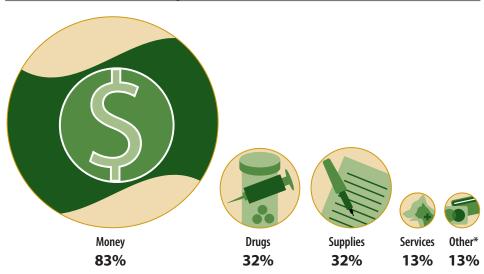
Gray's experience, while shocking to her and the hospital's owners, wasn't unique.

How much did they take?



Percentage of practices answering the question: What was the approximate dollar value? Results may not total 100% due to rounding.

What did they steal?



*Other: computers, credit card fraud (3%), equipment and surgical supplies, identity theft and more. Percentage of practices answering the question: What did they steal? Results total more than 100% because some practices gave multiple answers.

In a recent AAHA survey, a whopping 86% of respondents said their veterinary clinics had been stolen from by employees.

Fifty-five percent of those said frontoffice staff had been behind thefts of money or goods, 35% said veterinary assistants had stolen, and 7% said that veterinary associates had stolen from the business, with 83% of the thefts being money and 32% drugs (percents exceed 100% because survey allowed respondents to submit multiple reasons).

The survey, the first national survey on theft and embezzlement in the veterinary profession, was conducted in spring 2010.

Sadly, experts say more veterinary hospitals can assume they're being stolen from, even if they haven't yet caught discrepancies in their books or supplies.

"Employee theft has really increased with the downturn in the economy," says attorney John Palter, Riney Palter, Dallas, which represents employers in such cases. "Remarkably, the thefts are generally coming from employees who are perceived by their employers as being the most loyal. And they're particularly increasing in smaller businesses where there is a sense of ownership by the employees."

Stealing

That's not surprising to AAHA survey participants; more than 40% of them said their hospitals employ 20 or

Who's the thief?



Percentage of practices answering the question: Who stole from your practice? Results total more than 100% because some practices gave multiple answers.

fewer people. They also say that the balance sheet isn't the only place to look for theft.

"All of a sudden, our pill counts got really out of whack," says Cindy Howarth, practice manager, Seven Hills Veterinary evidence to show police, who arrested the now-ex-employee. "This technician was just under our radar," she says. "We had a couple of others who spoke their minds about every little thing, and we made the assumption it was one

"Our bookkeeper... had been with us just about from the beginning of our ownership of the practice and worked her way up from kennel worker."

Center, Aurora, Colo. "We were keeping track of controlled drugs, but maybe not as well as we should have been doing it, and we couldn't figure out what was going on."

It finally became evident that someone was stealing medications. While Howarth had a suspicion that she knew who was taking the pills, she set up a hidden web cam at the locked drug cabinet and began monitoring it, day and night.

Sure enough, they caught a technician unlocking the cabinet, removing bottles and returning them later on, having taken pills out and pocketed them.

"It wasn't the person we'd suspected," says Howarth. "This person had a makeshift key and was jimmying the latch open. And we'd noticed it was more difficult to use our keys, but just thought it was wear and tear."

Thanks to the web cam, Howarth had

of them. It was surprising to see who it really was." Once again, it was an employee who'd been with the practice for quite some time.

Palter says that's not surprising. "We're seeing people who feel entitled," he says. "They feel like they've put in just as much time and effort as the owners, and this is their place as well. They feel that what they're taking is no more and no less than what they're entitled to."

That's why, he says, across-theboard, precautions against theft and a solid system of checks and balances are critical for all businesses.

Catching the thief

"I am a huge advocate of what I call the top-drawer test," says certified fraud examiner Denise McClure, president of Averti Fraud Solutions, Boise, Id. "You should

How Do You Stop Theft?

We asked owners and managers how they protect their practices. Here are the most common answers:

- Cash controls, including checks and balances
- · Inventory controls
- Password required to use equipment, software
- · Practice management software controls
- · Audits performed regularly by a third party
- General oversight or control by owner or spouse
- Staff training, teamwork and transparency
- Hiring practices include background checks
- · Nothing, we trust our staff
- Secure building
- · Security cameras

Most practices take a hit-or-miss approach to security, leaving the doors wide open to inventory, drugs, cash, credit cards and more.

Source: First National Survey on Theft and Embezzlement in Veterinary Practices, May 2010. AAHA © 2010.



Veterinary Assistant



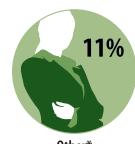
Front-Office Staff



Consultant



Supplier



utner*

*Other: boarding, kennel and grooming staff; cleaning and maintenance crews; client; human resources staff. Data from the First National Survey on Theft and Embezzlement in Veterinary Practices, May 2010. AAHA © 2010.



Can an Owner Steal From a Practice?

Sure. When a practice is structured as a separate legal entity, such as corporation, LLC or partnership with more than one owner, and one of the owners takes anything from the company, such as cash, goods or services in excess of what is allowed in the ownership agreement, that's theft from the business entity — and, by extension, from the other owners. This is not the case when the business entity is a sole proprietorship, where the business and owner are one and the same.

— Charlotte Lacroix, DVM, JD, Veterinary Business Advisors

always have keys to all of the file cabinets and desks of employees — everything in that office belongs to the employer.

"So the first thing you do is start opening top drawers and look around. People who are stealing cash always keep a second set of books, and surprisingly, they often keep them in their desk drawers," she explains. "And there's frequently some kind of evidence there, whether a stack of receipts, accounts-receivable notes or things that just don't make sense."

The second routine step is to review computer accounting files and check facsimiles regularly. "You want to look for transactions that have been changed," she says.

"We see someone entering a check as having been printed to a vendor and then actually printing it to themselves, or reclassifying transactions as having been to different vendors. Review facsimiles of "Ask your customers if they've paid invoices that are coming up as unpaid," Palter adds.

And, he says, be sure there's sufficient separation of duties to minimize the opportunities people have to steal. "It's of utmost importance for all small-business owners to separate the people who have access to cash from the people who keep the books and records," he says. "Don't let the same person take the money and keep the books."

Palter also advocates motion-activated video cameras in a business where theft of materials is suspected.

Prosecuting the thief

Once there is evidence of a theft, either in books or on video surveillance, owners can call police and terminate the employee. But even that takes some thought.

"Spouse was the hospital administrator... found out during the divorce, after forensic accounting was done."

all of your checks to be sure they're not being cut to employees," she explains.

McClure encourages hospital owners to subscribe to a toll-free hotline of some kind (they're a few dollars a month, she says) that employees can anonymously call and report their suspicions of theft. Those suspicions are then turned over to practice owners for investigation and action.

"There are some really good ones that cost about \$500 for set-up and then \$1 per employee per year," she says. "So for 10 employees, you're going to pay \$510 the first year and then just \$10 per year after that. It just doesn't make sense to not do something like that."

Keeping in close contact with vendors, even going so far as to periodically call them to ask if they've received payments for things listed in the accounting system, is good practice, according to Palter.

"One of the first things a fired employee will do is seek unemployment," Palter says. "Work-related misconduct disallows unemployment. So you need to really document that before you terminate an employee.

"And, depending on the amount of the theft, you have the right to initiate a civil lawsuit against the employee to recover the amount stolen, and you do not need a criminal conviction to do that," he explains.

"If you proceed criminally, you're looking at filling out a police report and having the police investigate it," Palter says. If that seems onerous, "you always have the right to go to civil court and get a judgment against them," he adds.

Criminal charges are necessary to deny unemployment.

"If you're looking at a few hundred dollars missing, it's often best to



©iStockphoto com/Chris Rogers

It Happened to Me

Read these stories and others at *Trends online*, www.trends.aahanet.org > Search: Theft.

A manager would swipe her own credit and debit cards and then press the Credit button, sending small amounts from our business account directly to her accounts.

We set a trap. She called to see if she could use our dog training room on a Sunday. I knew she just wanted access to the credit card machine in that room.

We had the police right there when she walked into the room, swiped her credit card, and pushed the Credit button — sending nearly \$10,000 to her account!

— Cottonwood Heights, Utah

I am forced to close my practice after 10 years of ownership and find a job at age 60. I am trying to save my family and my home, am negotiating with the IRS, and will have to declare bankruptcy. I am unable to sell and can only walk away with my personal effects.

— Teaneck, N.J.

Surgical patients were not becoming adequately sedated. Some bottles of Hydromorphone often had the cap off. With a magnifying glass I could detect a pinprick at the far margin of the rubber stopper.

I installed cameras and got three very clear videos . . . Two years later, he pled guilty.

— Seekonk, Mass.

A long-term employee stole cash, up to \$200 at a time, from doctors' pockets while their pants were hanging in the closet while they were in surgery.

— Rocklege, Fla.

Head receptionist practiced medicine without a license on off hours. After she left her "clients" started to call in, asking to have her come to their homes for "appointments."

— San Bernadino, Calif.

Previous employee stole owner's identity and opened credit cards and lines of credit in excess of \$150,000.

— Colleyville, Texas

The practice manager defied the owners' policy to pay only 50% of employees' health insurance premium. She paid the full premium because she thought staff couldn't afford their share of the premium.

— Westport, Conn.

We had a receptionist take client credit card slips out of the safe so she could use the numbers. We had to notify all the clients affected and have them cancel their cards.

— Westport, CT

During emergency hours at night a client slipped into a new section of the hospital and stole a computer.

— Hollywood, Fla.

In the exam room, the associate would tell clients the cost of their visit was something like \$300. Then he would say we offered a cash discount. He would collect \$250 from the clients in the exam room. Then he would adjust the charges, give the receptionists \$150, and pocket the other \$100 himself.

The receptionists said that, since he was a vet, they didn't question him.

I estimate that in eight months, he stole around \$200.000.

— Henderson, Nev.

I found about \$2500 in charges to the business VISA account for cell phone, groceries, restaurants, gas, etc. The office manager admitted to using the card for personal expenses.

About a year later, I received a phone call from a veterinarian in North Carolina who had hired him and had lost \$15,000 before he realized what was happening.

I have heard the guy now lives in the Chicago area.....

— Chesapeake, Va.

"She was an incredible employee. She was impeccable. She had no bad habits, always on time, very trusted."

document and defend yourself against unemployment compensation," he says. "Have the police come out and file a report, and don't take it any farther. It's also appropriate to seek out civil representation. Oftentimes, you can go in very quickly and attach the employee's bank account, where perhaps some of the money still resides."

But covering all the bases before that call to the police is also critical.

"Once you have the police come to your location, the word is out," says McClure. "Records sometimes will start disappearing at that point. Before you do that, get as many records as you can. Get your Quickbooks files copied. Take a snapshot of the hard drive — that's legally admissible in court."

She says criminal prosecution is almost always a good idea.

"I'm a proponent of prosecuting people," she says. "If you just terminate someone who's stealing from you, they're going to go on to the next place and steal from them. It becomes an obsession or addiction with people. Money is very easy to steal from small

businesses, and once people get a taste of it, it's hard to quit."

Howarth says the employee who was stealing drugs from her office was prosecuted and ended up paying restitution to the hospital. But the process was so unsettling that she no longer trusts anyone, and everything is under much stronger lock and key than before the theft.

"The whole idea that there's someone there who can put your patients and your practice and everything else at risk is very unnerving," she says.

Gray says her office has upgraded its accounting software to disallow invoice deletions and changes without a record of those changes, and that no one but her is allowed to go to the bank on behalf of the practice. Through insurance, her office was about to recoup about \$4,500 of the \$6,000 they know was stolen.

"I scrutinize everything now," she says. "Some people don't like that. But I would have never found that theft if we were busy the day I checked that one invoice."

Kim Fernandez is a freelance writer in Bethesda, Md., and a frequent contributor to *Trends*.

Bamboozled!

Thieves have more up their sleeves than you can imagine. Protect yourself from these common tricks:

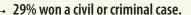
- · Stealing from cash box, bank deposits
- Stealing or falsifying company checks
- Using business credit cards for personal purchases
- Crediting return of bogus purchases to personal credit cards
- Manipulating invoices in practice management software
- Discounting products or services for friends
- Pocketing cash while making change
- Encouraging clients to pay in cash, failing to invoice or record transaction

Share the Horror!



Read the horror stories — and tell how inside thieves hit your practice — at *Trends online* (www.trends.aahanet.org).





Among practices grossing \$2 million or more, 43% had won a case against the thief.

Among practices grossing less than \$500,000 in 2009, only 17% said they had won a criminal or civil suit against the thief.

 Practices with suspected incidents of theft or embezzlement

Data from the First National Survey on Theft and Embezzlement in Veterinary Practices, May 2010. AAHA © 2010.



Draw the line.

Unchecked, a single female flea can produce up to 2,000 eggs in her lifetime.¹ And yet, many flea products are powerless to prevent an infestation once the flea lays eggs. With its patented combination of fipronil and the IGR (insect growth regulator) (S)-methoprene, FRONTLINE® Plus is still the only product available from the veterinarian that kills flea eggs, flea larvae, adult fleas, tick larvae, tick nymphs and adult ticks on both dogs and cats.

Advantage®, Advantage Multi® (imidacloprid/moxidectin), K9 Advantix®, Comfortis® (spinosad), Revolution® (selamectin), Sentinel® (milbemycin oxime/lufenuron), Vectra® and Vectra 3D® all come up short – not one of them provides the COMPLETE flea and tick control of FRONTLINE Plus on both dogs and cats.





¹ Dryden M, Houlton D. Understanding Flea Biology and Control. Veterinary Practice Staff. Vol. 2, No. 3 May/June 1990. 6-9

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AAHA Nutritional Assessment Guidelines for Dogs and Cats



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AAHA welcomes the endorsement of these guidelines by the American College of Veterinary Nutrition and the World Small Animal Veterinary Association.

These guidelines were sponsored by a generous educational grant from Hill's Pet Nutrition.

Introduction

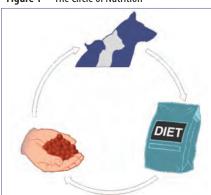
he American Animal Hospital Association recommends these nutritional assessment guidelines because good nutrition enhances pets' quality and quantity of life, and is integral to optimal animal care. Incorporating nutritional assessment into regular animal care is critical for maintaining pets' health, as well as their response to disease and injury. It requires little to no additional time or cost.

The specific goals of this article are to provide:

- Awareness of the importance of nutritional assessment of dogs and cats.
- Guidelines for nutritional evaluation of animals to promote optimal health and response to disease.
- Evidence and tools to support recommendations.

The positive impact of proper nutrition on health and disease is well established in all animals. Appropriate feeding throughout all life stages can help prevent diet-associated diseases, as well as to assist in the management of other diseases. For example, diets formulated for dogs and cats with chronic kidney disease have been shown to provide significant benefits. 1,2,3

Figure 1—The Circle of Nutrition



Consider these interconnected variables during
nutritional assessment.
Factors specific to the animal, the diet and feeding
management/environment
(symbolized by the food
held in the hands of the
owner) should be assessed.
[Provided courtesy of ACVN]

The National Research Council (NRC) of the US National Academy of Sciences is the leading provider of nutrient recommendations for dogs and cats.⁴ The NRC publications form the basis for Association of American Feed Control Officials (AAFCO) nutrient profiles, which are updated routinely.⁵ AAFCO provides a mechanism for developing and implementing uniform and equitable laws, regulations, standards and enforcement policies, and establishes nutrient profiles for cat and dog foods.

Assurance of proper nutritional health, however, entails more than meeting nutrient profiles; additional factors must be considered. Figure 1 represents the "Circle of Nutrition," symbolizing the comprehensive approach to clinical nutrition used by the American College of Veterinary Nutrition (ACVN).

According to this approach, nutritional assessment considers several factors that are described in detail in this document. An *iterative process*, in which each factor affecting the animal's nutritional status is assessed and reassessed as often as required, provides a thorough nutritional assessment of the small animal. ^{6,7,8} The factors to be evaluated include the animal, the diet, feeding management and environmental factors, as described below.

Animal-specific factors

Animal-specific factors include the age, physiological status and activity of the pet. Problems related to animal factors are referred to as *nutrient-sensitive disorders* (e.g., intolerances, allergies and organ-specific diseases). Diet choice for these animals should be restricted to those formulated to meet the disease-associated nutritional limitations of the specific animal.

Diet-specific factors

Diet-specific factors include the safety and appropriateness of the diet fed to the animal in question. Problems related to diet factors are referred to as *diet-induced disorders* (e.g., nutrient imbalances, spoilage, contamination, adulteration). Animals with these disorders may be treated by feeding a diet known to be appropriate for the animal.

Table 1 Definitions and Acronyms		
Screening evaluation	nitial evaluation performed on all animals.	
Extended evaluation	In-depth information-gathering based on issues of concern identified during initial screening.	
Iterative process	Each factor is assessed and re-assessed as often as required.	
Life stage	Life stages of dogs and cats refer to periods of life that may influence nutritional needs (e.g., growth, reproduction and adult, for which AAFCO provides nutrient profiles). 44,45,46	
Satisfactory diet	Complete (all nutrients present), balanced (nutrients present in proper proportions), digestible (nutrients in the diet are available to the animal), palatable (eats willingly), sufficient (amount, see text) and safe.	
MER	Maintenance energy requirements.	
RER	Resting energy requirements.	
BW	Body weight.	
BCS	Body condition score. An evaluation of body fat.	
MCS	Muscle condition score. An evaluation of muscle mass.	

Feeding management and environmental factors

Feeding factors include the frequency, timing, location and method of feeding, whereas environmental factors include space and quality of the pet's surroundings. Problems related to feeding and environmental factors are referred to as *feeding-related and environment-related disorders* (e.g., over- or underfeeding, excessive use of treats, poor husbandry, competitive eating in dogs, or lack of appropriate environmental stimulation). These situations require effective communications to produce the appropriate behavioral changes in the client.

Nutritional Assessment

Nutritional assessment is a two-part process.

- 1. *Screening evaluation* is performed on every animal. Based on this screening, pets that are healthy and without risk factors need no additional nutritional assessment.
- 2. *Extended evaluation* is performed when one or more nutrition-related risk factors are found or suspected based on the screening evaluation [Table 1].

The interview portion of the evaluation should be performed by a person trained to elicit required information from the caregiver most knowledgeable about the pet(s). A detailed nutritional history should be obtained. A variety of forms are available for recording these findings.^{9,10}

Screening evaluation

Nutritional screening is part of routine history taking and physical examination of every animal. Information collected should include assessment of each of the parameters of the circle of nutrition.

Certain life factors, by themselves, may not call for an extended evaluation if the animal is otherwise healthy. Low or high activity level, multiple pets in the home, gestation, lactation, or age <1 year or >7 years, all create a need for closer scrutiny. Although these factors by themselves may not trigger an extended evaluation, they should cause the veterinarian to scrutinize the pet's situation more closely.

Specific risk factors known to influence nutritional status include those listed in Table 2. When features are identified that raise one's "index of suspicion" for a nutrition-related problem, an extended nutritional evaluation may be indicated.

The value of an extended nutritional evaluation increases as the number of risk factors and their severity increase. Moreover, sufficient concern about any one parameter may be enough to warrant extended evaluation.

If no concerns are raised by the screening evaluation, then the nutritional assessment is complete.

BCS and MCS

Use a consistent method and scale to measure body weight (BW), body condition score (BCS) and muscle condition score (MCS) to assess current status and changes over time. Although different scoring systems may have situation-specific merits, the panel recommends that practices choose, and all doctors and staff consistently use, one system and record the total points on which it is based (i.e., the denominator).

The BCS evaluates body fat [Figure 2, see page 44]. Various BCS systems are used to evaluate dogs and cats (e.g., scales of 5, 6, 7 or 9).^{11,12,13}

The goal for most pets is a BCS of 2.5–3 of 5, or 4–5 of 9. (This may appear too thin to some pet owners, so client education is important.) These BCS goals are based on a limited number of studies in dogs and cats^{14,15,16,17} as well as those from other species. Disease risk associations with higher BCS in adult animals appear to increase above 3.5 of 5 (6 of 9). Similar risk associations for other life stages in client-owned pets have not been reported, but may occur at low BCS based on studies of laboratory-housed animals, and in humans. Additional research on dogs and cats is needed to more fully evaluate the effects of body condition on disease prevention.

The MCS differs from the BCS in that it evaluates muscle mass [Figure 3, see page 46]. Evaluation of muscle mass includes visual examination and palpation over the temporal bones, scapulae, lumbar vertebrae and pelvic bones. Assessing muscle condition is important because muscle loss is greater in animals

with most acute and chronic diseases (i.e., stressed starvation) compared to healthy animals deprived of food, when primarily fat is lost (i.e., simple starvation). Muscle loss adversely affects strength, immune function and wound healing and is independently associated with mortality in humans.^{19,20}

A simple MCS scale is currently undergoing development and validation.²¹ The authors' clinical experience suggests that early identification of subtle muscle loss, at the "mild muscle wasting" stage, is valuable for successful intervention.

Clinically, BCS and MCS are not directly related. An animal can be overweight but still have significant muscle loss. This can make an MCS of mild to moderate look relatively normal if not carefully evaluated. In these cases, although some of the areas of the body may appear relatively normal or even have excessive fat stores (especially over the ribs or in the abdominal region), muscle wasting is readily felt over bony prominences. Palpation is required for accurately assessing BCS and MCS, especially in animals with medium- to long-hair coats.

Table 2Nutritional Screening: Risk Factors

History	Check (✓) if present
Altered gastrointestinal function (e.g., vomiting, diarrhea, nausea, flatulence, constipation)	
Previous or ongoing medical conditions/disease	
Currently receiving medications and/or dietary supplements	
Unconventional diet (e.g., raw, homemade, vegetarian, unfamiliar)	
Snacks, treats, table food >10% of total calories	
Inadequate information about or inappropriate feeding management	
Inadequate or inappropriate housing	
Physical Examination	
Body condition score	
5-pt scale: any score other than a 3	
9-pt scale: any score less than 4 or greater than 5	
Muscle condition score: Mild, moderate or marked muscle wasting	
Unintended weight loss of ≥10%	
Dental abnormalities or disease	
Poor skin or hair coat	
New medical conditions/disease	

Figure 2—Body Condition Scoring (BCS) Systems. (Continued on next page.)

5 Point	Description	9 Point
1/5	Dogs: Ribs, lumbar vertebrae, pelvic bones and all bony prominences evident from a distance. No discernible body fat. Obvious loss of muscle mass. Cats: Ribs visible on short-haired cats; no palpable fat; severe abdominal tuck; lumbar vertebrae and wings of ilia obvious and easily palpable.	1/9
1.5/5	Dogs: Ribs, lumbar vertebrae and pelvic bones easily visible. No palpable fat. Some evidence of other bony prominence. Minimal loss of muscle mass. Cats: Shared characteristics of BCS 1 and 3.	2/9
2/5	Dogs: Ribs easily palpated and may be visible with no palpable fat. Tops of lumbar vertebrae visible. Pelvic bones becoming prominent. Obvious waist. Cats: Ribs easily palpable with minimal fat covering; lumbar vertebrae obvious; obvious waist behind ribs; minimal abdominal fat.	3/9
2.5/5	Dogs: Ribs easily palpable, with minimal fat covering. Waist easily noted, viewed from above. Abdominal tuck evident. Cats: Shared characteristics of BCS 3 and 5.	4/9
3/5	Dogs: Ribs palpable without excess fat covering. Waist observed behind ribs when viewed from above. Abdomen tucked up when viewed. Cats: Well proportioned; waist observed behind ribs; ribs palpable with slight fat covering; abdominal fat pad minimal.	5/9

Extended evaluation

Extended nutritional evaluation of animal, diet, feeding and environmental factors is indicated for animals identified to be at risk for any nutrition-related problems from the screening evaluation [Table 2]. Those items suggest that nutrition may play an important role in development of or management of the animal's underlying disease, or life stage. First, review and summarize the history, medical record and information obtained during the screening evaluation. Second, obtain additional data as appropriate, as described below. A more detailed list of potentially relevant historical factors may be found in various references.

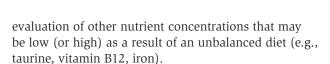
Animal factors

- Changes in food intake or behavior (e.g., amount eaten, chewing, swallowing, nausea, vomiting).
- Condition of the integument. Nutrition-related abnormalities may include variable combinations of dry, easily plucked hair; thin, dry or scaly skin; and reduced resistance to venipuncture (due to loss of normal skin collagen density).
- Diagnostic workup.
 - o Minimum database/laboratory testing as appropriate.
 - Specific testing might include a complete blood count (checking for anemia), urinalysis, biochemistry profile (including electrolytes, albumin), fecal culture or

Figure 2 (cont'd)—Body Condition Scoring (BCS) Systems.

5 Point	Description	9 Point
3.5/5	Dogs: Ribs palpable with slight excess fat covering. Waist is discernible viewed from above but is not prominent. Abdominal tuck apparent.	6/9
	Cats: Shared characteristics of BCS 5 and 7.	
4/5	Dogs: Ribs palpable with difficulty; heavy fat cover. Noticeable fat deposits over lumbar area and base of tail. Waist absent or barely visible. Abdominal tuck may be present. Cats: Ribs not easily palpable with moderate fat covering; waist poorly distensible; obvious rounding of abdomen; moderate abdominal fat pad.	7/9
4.5/5	Dogs: Ribs not palpable under very heavy fat cover, or palpable only with significant pressure. Heavy fat deposits over lumbar area and base of tail. Waist absent. No abdominal tuck. Obvious abdominal distension may be present. Cats: Shared characteristics of BCS 7 and 9.	8/9
5/5	Dogs: Massive fat deposits over thorax, spine and base of tail. Waist and abdominal tuck absent. Fat deposits on neck and limbs. Obvious abdominal distention.	9/9

Cats: Ribs not palpable under heavy fat cover; heavy fat deposits over lumbar area, face and limbs; distention of abdomen with no waist; extensive abdominal fat pad.



- Additional workup as indicated (e.g., imaging, endoscopy).
- Current medical conditions and medications.
 - Assess effects of the disease and any treatment plan on pet's nutritional status (e.g., thyroid disease).
 - Some medications (e.g., diuretics) or procedures (e.g., significant intestinal resection, drain placement) can cause a loss or malabsorption of essential nutrients.

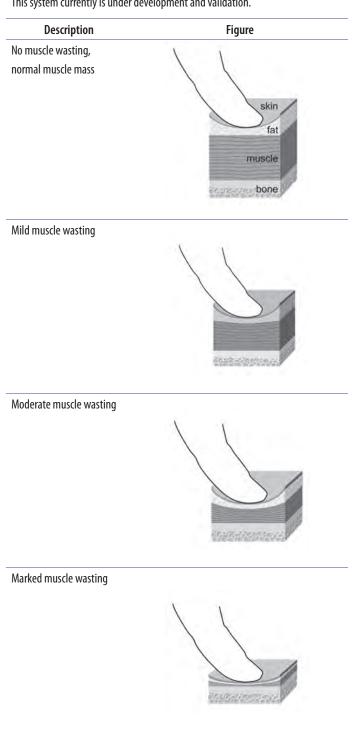
Diet factors

- Evaluate caloric density of current pet food, particularly
 if pet is below or above desired BCS, or if owner has to
 feed unusually large or small amounts to maintain desired
 BCS (may have to contact pet food manufacturer for
 this information).
- Evaluate other sources of nutrients: treats, table food, supplements, food used for administering medication, chew toys (e.g., rawhide).

- If disease conditions exist that may be the result of tainted or spoiled food, the diet should be submitted for testing.²² Questions about having food analyzed or tested for potential toxins may be referred to the state feed control official (www.aafco.org).
- Evaluate commercial foods.
 - Specific type, formulation, flavor, when purchased, where purchased, storage conditions.
 - Label information must include the guaranteed analysis, ingredient list, AAFCO nutritional adequacy statement, food type, manufacturers' contact information. Beware of label's role as advertisement.²³
 - The AAFCO adequacy statement provides several important facts:
 - Whether the diet is complete and balanced, and if so, for what life stages. All diets should be complete and balanced. If it says "intermittent or supplemental use only," it is not complete and balanced. That may be acceptable if it is a veterinary therapeutic diet and is being used for a specific purpose (e.g., severe kidney disease).

Figure 3—Muscle Condition Scoring

A muscle condition scoring (MCS) system. Evaluation of muscle mass includes visual examination and palpation over the temporal bones, scapulae, ribs, lumbar vertebrae and pelvic bones. [Provided courtesy of Dr. Tony Buffington] This system currently is under development and validation.



- Labels may include one of two statements regarding nutritional adequacy:
 - "[Name] is formulated to meet the nutritional levels established by the AAFCO Dog (or Cat) Food Nutrient Profiles for [life stage(s)]." (Chemical analysis of food)
 - 2. "Animal feeding tests using AAFCO procedures substantiate [Name] provides complete and balanced nutrition for [life stage(s)]." (Feeding trial analysis of food)
- Formulated foods are manufactured so the ingredients meet specified levels, without testing via feeding trials; interpret with caution. However, the use of feeding trials does not guarantee the food provides adequate nutrition under all conditions.
- AAFCO provides nutrient profiles and regulates pet food labeling for growth, reproduction and adult maintenance, but not for senior/geriatric pets.
- What is the manufacturer's reputation as a food maker?
 Have you had positive experiences with their products?
 What objective (not testimonial) information do they provide about their foods to assist evaluation?
- The other information provided on the label is of little practical value in assisting nutritional assessment.
 Because pet owners sometimes base their purchasing decisions on the initial ingredients or on unregulated terms such as "organic," "holistic," "human grade" or "premium," veterinarians and veterinary technicians must help them make informed decisions.
- Contact the food manufacturer with any questions or concerns. Consider asking the following questions, as appropriate:
 - Do you have a veterinary nutritionist or some equivalent on staff in your company? Are they available for consultation or questions?
 - Who formulates your diets, and what are their credentials?
 - Which of your diet(s) are tested using AAFCO feeding trials, and which by nutrient analysis?
 - What specific quality control measures do you use to assure the consistency and quality of your product line?
 - Where are your diets produced and manufactured? Can this plant be visited?
 - Will you provide a complete product nutrient analysis of your best-selling dog and cat food, including digestibility values?
 - What is the caloric value per can or cup of your diets?
 - What kinds of research on your products has been conducted, and are the results published in peerreviewed journals?

- · Evaluate homemade diets.
 - Contact a board-certified veterinary nutritionist to evaluate or formulate a homemade diet [Table 3].
 - Ask client about the specific recipe, preparation, storage, recipe rotation or substitution.
 - Consider sources and amounts of protein, carbohydrates, fats, vitamins and minerals; bioavailability.
 - Consider specific needs of cats (e.g., amino acids, arachidonic acid, etc.).
- Evaluate any unconventional diet, whether commercial or homemade.
 - Evaluate additional risks of raw meat diets.^{24,25,26}
 Pathogenic bacteria may cause gastroenteritis and can be shed in the feces for up to 1 week after ingestion of contaminated raw meat. If an animal that has been fed a raw-meat diet is hospitalized, evaluate the risk to hospital staff and other hospitalized animals. In addition, raw diets containing bones can be associated with dental damage and esophageal/gastrointestinal obstruction or perforation.
 - Evaluate risks of vegetarian diets, particularly with cats but also with dogs.

Feeding management and environmental factors

- Primary feeder of pet.
- Feeding management (e.g., location, frequency).
- Issues with multiple pets (competition for food, threats).
- Other food providers and sources.
- Extent of enrichment (e.g., toys, other pets, housing, food-delivery devices).
- Activity of pet at home.
 - Type (e.g., leash walks, backyard, free roaming/ spontaneous).
 - o Amount (times per day/week).
 - o Energy level and amount of activity.
- Environmental stressors (e.g., recent changes in the home, uncontrollable outdoor stimuli, conflict over resources such as food or access to the owner, conflict between animals, etc.).^{27,28,29}
- Environment has a direct impact on nutrition. For example, both laboratory³⁰ and clinical³¹ studies of cats with lower urinary tract syndrome show that environment plays an important role in presentation of signs regardless of the diet fed. The role of environment in other "nutrient-sensitive" disorders in cats has been reviewed, and a recent study concluded that indoor confinement and physical inactivity rather than the proportion of dry food were risk factors in the development of type 2 DM in cats.³²
- In dogs, a range of clinical situations, including competitive eating, coprophagia and obesity, have been associated with environmental as well as with animal

and dietary factors.^{33,34} Additionally, provision of food in dispensing toys may improve the welfare of indoor-housed pets,³⁵ so changes in feeding containers also may be more important than is generally perceived.

Interpretation, Analysis and Action

Following the nutritional assessment, interpret and analyze the information that has been gathered to devise an action plan. Consider the following:

Animal factors

- 1. Evaluate the animal's condition with respect to the current food intake. Estimate current energy needs. For inpatients, RER may be estimated using any of a variety of published formulas. For outpatients, either label recommendations or a formula may be used as a starting point. These are just population-based starting points for energy requirements, which can vary by 50% in either direction for cats, and by 30% in either direction for dogs (particularly with the MER).³⁶ These levels are further influenced by life stage, activity and environment variables.
- 2. Create a monitoring plan. Teach the client to monitor BW, BCS and/or MCS as appropriate. Adjust intake as needed to match changing needs over time.
- 3. Adjust or include dietary supplements if necessary, recommending specific types and amounts.
- 4. A diet change is sometimes necessary. Preferences for and recommendations about diet transition methods vary, with no clear evidence showing any one method is superior. Clinicians should use and recommend techniques based on their individual assessment of client and animal. Some animals tolerate an abrupt change in diet with little problem, although some appear to have fewer GI issues when food is gradually changed over a 7- to 10-day period.

Diet factors

- Determine if current amount and type of food are appropriate, based on life stage, lifestyle/activity, disease, body condition, concurrent medications and/or medical procedures.
- 2. If diet factors are determined to be inadequate, prepare a plan for food and treats that provides appropriate calories and nutrient intake for the animal.
- 3. Consider other food sources in total intake recommendations if necessary.
- 4. Recommend a specific feeding plan that incorporates pet food, treats, table food, feeding method, frequency and location.

Feeding management and environmental factors

1. Determine any changes in feeding management and any necessary environmental changes.^{37,38}

Table 3 Useful Websites for Client and Staff Education

Title	URL
AAFCO—Association of American Feed Control Officials (profiles, feeding, trials, ingredients)	www.aafco.org
2. AAHA—American Animal Hospital Association	www.aahanet.org
3. ACVN—American College of Veterinary Nutrition (specialty college for board certification; list of institutions that provide consultation; continual updates of links to resources for diet formulation and analysis)	www.acvn.org
4. AVNT—Academy of Veterinary Nutritional Technicians (pending approval in 2010)	Website under construction. Info: email to nutritiontechs@aol.com
5. FDA Center for Food Safety and Applied Nutrition (regulatory and safety issues, adverse event reporting, meetings, industry information)	www.fda.gov/aboutfda/centersoffices/cfsan/default.htm
6. FDA Pet Food Site (information, links, food safety issues, recalls, pet food labels, selecting nutritious foods, handling raw foods)	www.fda.gov/AnimalVeterinary/Products/AnimalFoodFeeds/PetFood/default.htm and www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm048030.htm
7. Indoor Pet Initiative (comprehensive recommendations for environmental enrichment for dogs and cats)	indoorpet.osu.edu vet.osu.edu/indoorcat.htm
8. NRC—National Research Council (nutrient requirements of dogs and cats)	www.nap.edu/catalog.php?record_id=10668#toc
9. Downloadable booklets for pet owners Your Cat's Nutritional Needs Your Dog's Nutritional Needs	dels.nas.edu/banr/petdoor.html
10. NIH Office of Dietary Supplements (evaluating supplements, Internet health info and more)	dietary-supplements.info.nih.gov/Health_Information/Health_Information.aspx
11. UC Davis Nutritional History Form (downloadable Word document)	www.vetmed.ucdavis.edu/vmth/small_animal/nutrition/newsletters.cfm
12. Pet Food Institute (information on ingredient definitions, labeling regulations, etc.)	www.petfoodinstitute.org/Index.cfm?Page=Consumers
13. United States Pharmacopeia Dietary Supplement Verification Program (voluntary program)	www.usp-dsvp.org
14. USDA Food and Nutrition Information Center (general supplement and nutrition information, links to various dietary supplement websites)	www.nal.usda.gov/fnic/etext/000015.html
15. USDA Nutrient Database (full nutrient profiles on thousands of human foods)	www.nal.usda.gov/fnic/foodcomp/search

- a. Whereas some dogs and cats can maintain good body condition when fed free choice, others require meal feeding of appropriate amounts to maintain good body condition.
- b. Confirm the use of an appropriate food-measuring device (e.g., an 8-oz measuring cup), and provide food in measured amounts (whether feeding free choice or meals).
- c. Management changes may include provision of feeding toys, and reducing conflict and competition for food.
- d. Environmental enrichment may include increased opportunities for activity (play, exercise), as well as efforts to decrease perception of threat from other animals (as well as humans) and reducing the frequency of unpredictable change in the animal's environment.
- 2. Create a plan for hospitalized animals.
 - a. Create a monitoring plan and a feeding plan as discussed under "Animal Factors" and "Diet Factors".
 - b. Offer usual and favorite ("comfort") foods if at all possible to promote food intake. Avoid introduction of novel diets intended for long-term feeding to avoid the risk of inducing an aversion to the diet. A food aversion is avoidance of a food that the animal associates with an aversive experience.
 - c. The optimal route required to achieve nutrient requirements should be reassessed daily, and may include:
 - i. Voluntary oral feeding.
 - ii. Coax feeding small changes, such as warming the food, taking the animal to a quiet area for feeding, having the owner feed the animal or stroking the animal while eating, can enhance food intake.
 - iii. Syringe feeding (be careful in animals with any nausea or who are stressed, as this can induce food aversions).
 - d. Other nutritional support techniques will be required for animals that have not eaten sufficient amounts by the aforementioned routes for 3-5 days (this includes the time of reduced appetite at home before hospitalization), and are not expected to resume reasonable amounts of food intake prior to further compromise of their nutritional status.^{39,40}
 - i. Use a feeding tube with animals that are not eating adequate amounts voluntarily. Use parenteral nutrition with animals that have gastrointestinal dysfunction or in animals whereby enteral feeding has increased risk of aspiration.
 - Evaluate closely and watch for complications associated with the route of nutrition used, particularly with recumbent or neurologically impaired animals.

- 3. Create a plan for non-hospitalized animals.
 - a. Create a monitoring plan and a feeding plan as discussed under "Animal Factors" and "Diet Factors".
 - Clearly inform the client of the recommended feeding management factors to ensure success. The client is part of the decision process and implementation of the specific action plan.
 - c. If obesity is present, provide a comprehensive plan to modify the environment (e.g., exercise, behavior modification and/or prescription weight control medication).
 - d. Create specific schedule for:
 - Follow up via telephone to elicit questions and verify compliance/adherence to recommended feeding management or environment changes.
 - ii. Repeat examination/assessment.
- 4. Consult with a specialist or refer anytime one feels unqualified to take action and monitor an animal [Table 3].

Monitoring

Healthy animals

Adults in good body condition should be reassessed regularly. Decisions regarding specific frequency of visits are made appropriately on an individual basis, based on the age, species, breed, health and environment of the pet. Healthy pregnant, lactating, senior and growing animals require more frequent monitoring. Pet owners should monitor their pet at home including:

- Food intake and appetite
- BCS and BW
- Gastrointestinal signs (e.g., feces consistency and volume; vomiting)
- Overall appearance and activity

Animals with disease conditions and/or recommended nutritional changes

Non-hospitalized animals for which extended nutritional evaluation was indicated may require more frequent monitoring of nutritional assessment parameters. Monitoring should include the items in Table 2.

Frequent monitoring of BCS and MCS is important, as many diseases are associated with suboptimal scores. Also, animals with medical conditions are more likely to receive dietary supplements and to have medications administered with food, so specific attention to and review of these issues, with an update of the dietary plan, are important at each visit to ensure that the overall nutritional plan is optimized.

Hospitalized animals

Daily monitoring of hospitalized animals includes the items in Table 2, also evaluating these additional items:

Nutrition in Your Practice

Put the guidelines to work in your practice. See how one practice is succeeding. Learn to persuade clients to take action. Explore issues and strategies with experts. Manage your food inventory like a retail pro.

The Biggest Winners: Case Study

Jan/Feb 2009, p. 45

Oradell Animal Hospital's successful weight management program offers valuable protocols and insights.

Food for Thought

May/June 2009, p. 35

How to think about, plan for and manage food sales when competition heats up and the economy cools down.

Merchandising Magic

May/June 2009, p. 67

Using tricks of the retail trade to better position your product sales.

Was Tabby Too Tubby? Communication Case Study

November/December 2008, p. 63

Words to use — and to avoid at all costs — when persuading clients to treat their pet's obesity.

Tackling the Fat Pet Problem

March/April 2009, Special Section

In this roundtable, five experts discuss issues, strategies and obstacles in managing the burgeoning fat-pet population.



Missing a past issue? Read these articles at *Trends online* (www.trends.aahanet.org).

- Specific feeding orders, which should include diet, route, amount and frequency.
- Fluid balance. Assessment of clinical signs (e.g., BW changes, pulmonary crackles) or diagnostic tests (e.g., central venous pressure).
- Addressing optimal route of intake. The optimal route required to achieve nutrient requirements could change during hospitalization and should be reassessed daily (see above).
- Quantifying and documenting nutrient intake (via all routes).

Many hospitalized animals are discharged prior to complete resolution of their underlying disease. Document and

communicate to the client the feeding method, caloric intake, diet, frequency and specific monitoring parameters, and the schedule for rechecks and re-assessment.

Discuss with the client any issues that may limit adherence to dietary recommendations (e.g., feeding schedule issues, complex instructions, financial restrictions) and address appropriately (e.g., offer over-the-counter options for appropriate diets if financial restrictions will prevent the owner from consistently feeding the prescribed diet). Create a specific schedule for follow-up via telephone to elicit questions and verify compliance/adherence.

Provide choices in diets that meet nutrient goals. Create a plan with the client about what to do if calorie/nutrient goals are not achieved.

When abnormal parameters have returned to normal or stabilized, the animal may continue on a therapeutic diet or be transitioned to a non-therapeutic diet. If a new diet is necessary, it may be introduced gradually, as previously described.

Client Education

Client communication and rapport are important for achieving desired outcomes.^{41,42,43} Technicians should be involved in the nutrition-evaluation process when they have knowledge and skills in both nutritional concepts and in communication.

Engage the client in decision making and defining expectations. Recommendations may be modified by the client's time, lifestyle and financial limitations. Use communication techniques that include various forms based on client preferences. Use various educational approaches and tools.

Demonstrating and teaching the client to evaluate the BCS and MCS are effective in engaging the client in their pet's care. Expectations and goals should be specific, achievable and include specific follow-up to monitor progress and compliance, and to adjust recommendations.

Inform clients about specific foods, and potential advantages, risks and concerns. Include recommendations on amount and frequency of diet fed, accounting for snacks, treats, table food, foods used for medication administration, and dietary supplements. Clients may enrich their pet's nutritional experience by interacting with them at feeding, providing food toys and playing and exercising with their pet.

Summary

Nutritional assessment is an important aspect of optimal animal care. This document provides guidance for appropriate, effective assessment, evaluation, action monitoring and education. With little practice, this approach can be efficiently incorporated into daily practice without additional time or expense. Stay tuned for further developments and expanding knowledge.

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Putting the AAHA Nutritional Assessment Guidelines to Work

Education in Your Area and on Your Desktop

The 2003 AAHA compliance study showed that only 7% of pets that could benefit from a better diet were actually receiving the recommendation. New AAHA education teaches you how to implement the AAHA Nutritional Assessment Guidelines in your practice so we can improve this statistic for the better!

We are offering three free progressive web events starting on September 9, as well as 14 regional workshops starting in October, covering everything from the science behind the guidelines to effective client communication.

Visit www.aahanet.org/nutrition for details, including course content, and dates and locations of the workshops.



The AAHA Nutritional Assessment Guidelines for Dogs and Cats were sponsored by a generous educational grant from Hill's Pet Nutrition. Educational events are presented in collaboration with Hill's Pet Nutrition.



The AAHA Nutritional Assessment Guidelines – What They Mean to You

Tony Buffington, DVM, PhD, DACVN
September 9, 2010
Live at 1pm FT 12pm CT 11am MST

Live at 1pm ET, 12pm CT, 11am MST, 10am PT

This web conference will provide an overview of the guidelines and how they were developed, including:

- How the circle of nutrition applies to patient assessments
- Body Condition Scoring (BCS) and Muscle Condition Scoring (MCS)
- What's involved in a basic assessment and extended evaluation
- Nutrition action plans and monitoring plans for each patient

Taking Action With the Nutritional Assessment Guidelines

Kate Knutson, DVM
Susan Thorson, DVM
September 23, 2010
Live at 1pm ET, 12pm CT, 11am MST, 10am PT

Second in the series, this web conference will stress implementation of the AAHA Nutritional Assessment Guidelines for Dogs and Cats in private practice.

Other educational events planned around the AAHA Nutritional Assessment Guidelines include:

- A pre-recorded webcast, Tough Talk: Communicating Nutrition With Difficult and Not-So-Difficult Clients, available October 4-17
- Nutrifluent: Speak the Clients' Language and Have
 Them Eating Out of Your Hand workshops Available in 14 locations across the U.S. and Canada, these are designed as day-long, interactive and engaging sessions that expand upon the Tough Talk webcast.

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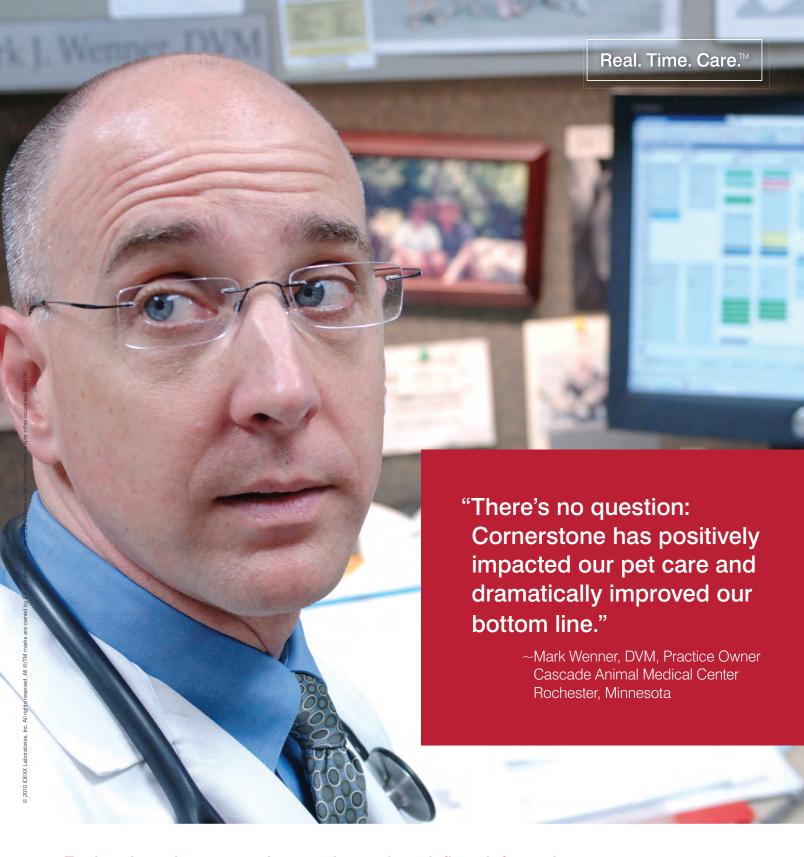
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Never Compromise Your Vision, Passion



Practice of the Year finalist emulates Mayo Clinic

by Jack Sommars

arlier this year, the Animal Medical and Surgical Center of Scottsdale, Ariz., was named the third-place finalist in AAHA's inaugural Practice of the Year competition.

What is the reason for its success? Owner Charles Pullen, DVM, MS, talks candidly about his triumphs — as well as his mistakes — during his 40-year career in veterinary medicine.

Why did you apply for the award?

"Laurie Miller, our AAHA representative, recommended that we apply. We're always interested in doing everything we can to increase client and public awareness of AAHA and what it means to be an AAHA-accredited hospital," says Pullen.

"We're also very proud of what we have accomplished and were curious to see how we stacked up against other accredited practices."

What makes the Animal Medical and Surgical Center so special?

"I want to emulate Mayo Hospital because that's where I received my personal medical care and was so impressed by their patient service. We want our clients to think they are at a 'Mayo' hospital for animals," states Pullen.

"We focus on absolute cleanliness, attention to detail and dedication to client service. Our housekeeping is impeccable.



"We want them [clients] to think that their pet is the only patient we're going to see that day." — Charles Pullen, DVM, MS

We're always trying to offer cutting-edge technology and procedures.

"I had a new client come in this week. He is a well-known architect who designs buildings for human medicine. He was awestruck by our facility and told me it was nicer than many he has designed.

"We're in the process of installing magnetic resonance imaging (MRI) equipment. When the technician was taking measurements, he said, 'Of all the MRIs I've put in human hospitals, I have never seen a nicer facility than this.'

"That's the feeling we want to create, and I think we're accomplishing that."

Making your mission and vision come to life is a struggle for many practices. What is your secret?

"The secret is simple," says Pullen. "Hire the right leaders who share your vision and your intensity for excellence. These leaders are just as enthused about accomplishing your goals as you are.

"It also doesn't hurt that I have two daughters who play key roles in this. They are extremely concerned about my success and accomplishing my goals and vision."

Can you describe the culture of your practice?

"Professionalism is the core of our practice culture," Pullen explains.

"Small animal medicine and surgery has always been a very important part of my life, and I want the public to know how advanced we have become, while remaining very personal and intimate with my clients.

"We pride ourselves in spending quality time with our clients. When they come into our exam room, they know we're devoted to them. We want them to think that their pet is the only patient we're going to see that day.

"Another example of this culture is the constant communication we have when a patient is hospitalized. The owner is called when the patient is going under anesthesia. He or she is given updates two to four times during a procedure and also receives

a call from the intensive care unit (ICU) nurse when the patient is awake and stable. The owner then receives a call at the end of the day from the surgeon to give him or her a brief overview of the surgery and to let him or her know that the pet is quiet, sedated and pain-free in the ICU.

"Every patient is discharged with a pristine and immaculate bandage and clean incision, brushed out and smelling pleasant, and completely clean and bathed if needed, no matter what the procedure it was in for.

"The most successful surgery in the world will result in a dissatisfied client if his or her pet goes home with a blood-stained incision or feces-stained bandage or smelling of urine. This requires constant vigilance but is well worth it in client satisfaction and your professional image."

In terms of compliance, where do you get the "biggest bang for your buck"?

"Consultation, consultation, consultation! That means spending the time with the client to explain in detail the procedure or surgery that is necessary to help the pet," says Pullen.

"When people understand why it is important to perform a certain procedure, they are much more likely to be committed to the financial sacrifice that may be required.

"We do a thorough consultation both prior to and following surgery. Before the pet goes home, we spend 30 minutes going over pictures and X-rays of the surgery and reviewing the two pages of discharge instructions.

"So, by consultation, I mean there's constant contact, educating the client and spending the time with the client to explain the procedure. That's when you get compliance."

Was there a turning point in your practice when you made the jump from being a good practice to a great one?

"No question," says Pullen. "It was when we opened our new 15,000-sq-ft

medical center. This new center reflects my philosophies of practice I have had for more than 40 years.

"I felt that my physical surroundings now corresponded with the standard of excellence that I have tried to achieve in my medical and surgical practice throughout my career.

"Almost overnight, our practice went from a 10-person staff to a 40-person staff. I feel that the new center also inspired our staff to perform at a new level."

What is the biggest mistake you have made as a practice owner? More importantly, what have you learned from it?

"Well, I've certainly made my share of mistakes," says Pullen. "However, I think the biggest is bringing on partners, associate doctors and other staff members who did not share my philosophy of what veterinary medicine is all about.

"You must surround yourself with people who share your vision of excellence, dedication to the client and to the patient, and dedication to hard work and long hours.

"You cannot maintain this intense level of practice if everyone on the staff does not share that intensity naturally within himself or herself. It is not something you can teach or change in a person.

"Some people just do not share that vision. Mediocrity is okay with them. If they don't fit into that spoke of the wheel, however, your wheel is going to be unbalanced. And even one person can throw you off."

What is the greatest challenge facing the Animal Medical and Surgical Center?

Pullen replies, "Growing this practice to utilize the new facility fully to its maximum capacity, which would be a 6- to 10-doctor practice grossing \$6 to \$8 million per year.

"Right now we have four doctors on staff.

"We intend to accomplish this growth by continuing intense marketing, through



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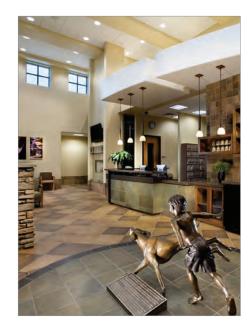
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Impress clients with the time you spend with them. Also, project a professional image. Show your concern for the clients and their pets. our website, business-to-business plan, rescue organizations, and therapy and service dog work as well as by adding MRI equipment and new innovative treatment for allergies, cancer, glaucoma and osteoarthritis.

"We also think an emergency clinic would be a perfect fit for this facility. We have one of the nicest ICUs and isolation wards anywhere.

"When I built this facility, I had a 10-year plan. I'm 6 years into that plan. So, I have 4 years to go. That's when I intended to retire, at age 72."

Reflecting on your quest to be one of AAHA's finest practices, if you have one piece of advice for other practitioners, what would it be?

"Not to be repetitive," says Pullen, "but I would have to go back to consultations. I often hear clients who tell me, 'I appreciate so much you spending so much time with us and explaining in detail about this surgery. We've been to two other veterinarians; you're our third opinion, and no one has taken the time to explain this. Now we understand why it costs so much and why we need to do this.'

"These consultations should not take place in an exam room. They should take place where people can sit down, be at ease, spend the time and feel comfortable in this consultation.

"I think, lastly, that I've learned to never compromise my vision. I know I'm a little older in my career than most are to build a facility like this, but I've practiced this way.

"Since I built this facility, I feel that I now have a medical center that expresses my vision and how I practice.

"How you dress, how your building looks, how nice a bandage you put on and how clean your work setting typifies all these things. It speaks volumes about who you are and what kind of medicine you practice.

"Always dress professionally, never in casual "devil may care" attire.

"That's why Mayo Hospital requires their doctors to wear suits, not just a shirt and tie, when they see patients in the exam room.

"So, impressing the clients with the time you spend with them certainly is the number one thing. It is also important to personify that professional image while you do it. You're concerned for clients and concerned for their pets, expressing confidence to them and letting them feel that confidence.

"That's what sets us apart."

 $\label{lem:commars} \textit{Jack Sommars is an award-winning journalist based in Denver, Colo.}$

2010 AAHA Practice of the Year Finalists

Five veterinary practices are honored as Practice of the Year finalists. The award recognizes achievement in accreditation score, mission and vision, staffing, continuing education and training, community service, and compliance for canine fecal testing and dental prophylaxis. The finalists are:

Animal Medical Hospital Charlotte, N.C. www.animalmedical.net

Blue Springs Animal Hospital & Pet Resort Blue Springs, Mo. www.bluespringsanimalhospital.com

Golden Triangle Animal Hospital Southlake, Texas www.goldentriangleanimalhospital.com

Paradise Pet Hospital Las Vegas, Nev. www.paradisepethospital.com Windsor Veterinary Clinic PC Windsor, Colo. www.the.windsorvet.com



Read profiles of the firstand second-place winners in the May/June and July/

August issues of *Trends digital edition*.

And, check out narrated slide shows featuring interviews with practice owners or managers at *Trends online*. All are available at *www.trends.aahanet.org*.

To see photos of Accredited Practice of the Year Award third-place winner Animal Medical and Surgical Center of Scottsdale, Ariz., go to *Trends online* (www.trends.aahanet.org) > Search: Practice of the Year. There you'll also find narrated slide shows of the first-and second-place winners.



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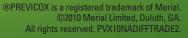
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For oral use in dogs only. Use of this product at doses above the recommended 2.27 mg/lb (5.0 mg/kg) in puppies

less than seven months of age has been associated with serious adverse reactions, including death (see Animal ress than seven months or age has been associated with serious adverser eactions, including bearingset Safety). Due to tablet sizes and scoring, dogs weighing less than 12.5 bl (5.7 kg) cannot be accurately dosed. All dogs should undergo a thorough history and physical examination before the initiation of NSAID therapy. Appropriate laboratory testing to establish hematological and serum baseline data is recommended prior to and periodically during administration of any NSAID. Owners should be advised to observe for signs of potential drug toxicity (see Adverse Reactions and Animal Safety) and be given a Client Information Sheet about PREVICOX Chewable Tablets.

For technical assistance or to report suspected adverse events, call 1-877-217-3543

Precautions: This product cannot be accurately dosed in dogs less than 12.5 pounds in body weight. Consider appropriate washout times when switching from one NSAID to another or when switching from corticosteroid use to NSAID use.

As a class, cyclooxygenase inhibitory NSAIDs may be associated with renal, gastrointestinal and hepatic toxicity. Sensitivity to drug-associated adverse events varies with the individual patient. Dogs that have experienced adverse reactions from one NSAID may experience adverse reactions from another NSAID. Patients at greatest risk for adverse events are those that are dehydrated, on concomitant diuretic therapy, or those with existing renal, cardiovascular, and/or hepatic dysfunction. Concurrent administration of potentially nephrotoxic drugs should be carefully approached and monitored. NSAIDs may inhibit the prostaglandins that maintain normal homeostatic function. Such anti prostaglandin effects may result in clinically significant disease in patients with underlying or pre-existing disease that has not been previously diagnosed. Since NSAIDs possess the potential to produce gastrointestinal ulceration and/or gastrointestinal perforation, concomitant use of PREVICOX Chewable Tablets with other anti-inflammatory drugs, such as NSAIDs or corticosteroids, should be avoided. The concomitant use of protein-bound drugs with PREVICOX Chewable Tablets has not been studied in dogs. Commonly used protein-bound drugs include cardiac, anticonvulsant, and behavioral medications. The influence of concomitant drugs that may inhibit the metabolism of PREVICOX Chewable Tablets has not been evaluated. Drug compatibility should be monitored in patients requiring adjunctive therapy. If additional pain medication is needed after the daily dose of PREVICOX, a non-NSAID class of analgesic may be necessary. Appropriate monitoring procedures should be employed during all surgical procedures. Anesthetic drugs may affect renal perfusion, approach concomitant use of anesthetics and NSAIDs cautiously. The use of parenteral fluids during surgery should be considered to decrease potential renal complications when using NSAIDs perioperatively. The safe use of PREVICOX Chewable Tablets in pregnant, lactating or breeding dogs has not been evaluated.

Adverse Reactions:

Osteoarthritis: In controlled field studies, 128 dogs (ages 11 months to 15 years) were evaluated for safety when given PREVICOX Chewable Tablets at a dose of 2.27mg/lb (5.0 mg/kg) orally once daily for 30 days. The following adverse reactions were observed. Dogs may have experienced more than one of the observed adverse reactions during the study

Adverse Reactions Seen in U. S. Field Studies

Adverse Reactions	PREVICOX (n=128)	Active Control (n=121)
Vomiting	5	8
Diarrhea	1	10
Decreased Appetite or Anorexia	3	3
Lethargy	1	3
Pain	2	1
Somnolence	1	1
Hyperactivity	1	0

PREVICOX (firocoxib) Chewable Tablets were safely used during field studies concomitantly with other therapies. including vaccines, anthelmintics, and antibiotics.

Soft-tissue Surgery: In controlled field studies evaluating soft-tissue postoperative pain and inflammation, 258 dogs (ages 10.5 weeks to 16 years) were evaluated for safety when given PREVICOX Chewable Tablets at a dose of 2.27 mg/lb (5.0 mg/kg) orally approximately 2 hours prior to surgery and once daily thereafter for up to two days. The following adverse reactions were observed. Dogs may have experienced more than one of the observed reactions during the study

Adverse Reactions Seen in the Soft-tissue Surgery Postoperative Pain Field Studies

Adverse Reactions	Firocoxib Group (n=127)	Control Group* (n=131)	
Vomiting	5	6	
Diarrhea	1	1	
Bruising at Surgery Site	1	1	
Respiratory Arrest	1	0	
SQ Crepitus in Rear Leg and Flank	1	0	
Swollen Paw	1	0	

^{*}Sham-dosed (pilled)

Orthopedic Surgery: In a controlled field study evaluating orthopedic postoperative pain and inflammation, 226 dogs of various breeds, ranging in age from 1 to 11.9 years in the PREVICOX-treated groups and 0.7 to 17 years in the control group were evaluated for safety. Of the 226 dogs, 118 were given PREVICOX Chewable Tablets at a dose of 2.27 mg/lb (5.0 mg/kg) orally approximately 2 hours prior to surgery and once daily thereafter for a total of three days. The following adverse reactions were observed. Dogs may have experienced more than one of the observed reactions during the study

Adverse Reactions Seen in the Orthopedic Surgery Postoperative Pain Field Study

Adverse Reactions	Firocoxib Group (n=118)	Control Group* (n=108)
Vomiting	1	0
Diarrhea	2**	1
Bruising at Surgery Site	2	3
nappetence/ Decreased Appetite	1	2
Pyrexia	0	1
Incision Swelling, Redness	9	5
Oozing Incision	2	0

A case may be represented in more than one category.

Post-Approval Experience (Rev. 2009): The following adverse reactions are based on post-approval adverse drug event reporting. The categories are listed in decreasing order of frequency by body system

Gastrointestinal: Vomiting, anorexia, diarrhea, melena, gastrointestinal perforation, hematemesis, hematachezia, weight loss, gastrointestinal ulceration, peritonitis, abdominal pain, hypersalivation, nausea

Urinary: Elevated BUN, elevated creatinine, polydypsia, polyuria, hematuria, urinary incontinence, proteinuria, kidney e, azotemia, urinary tract infection

Neurological/Behavioral/Special Sense: Depression/lethargy, ataxia, seizures, nervousness, confusion, weakness, hyperactivity, tremor, paresis, head tilt, nystagmus, mydriasis, aggression, uveitis

Hepatic: Elevated ALP, elevated ALT, elevated bilirubin, decreased albumin, elevated AST, icterus, decreased or increased total protein and globulin, pancreatitis, ascites, liver failure, decreased BUN

Hematological: Anemia, neutrophilia, thrombocytopenia, neutropenia

Cardiovascular/Respiratory: Tachypnea, dyspnea, tachycardia

<u>Dermatologic/Immunologic:</u> Pruritis, fever, alopecia, moist dermatitis, autoimmune hemolytic anemia, facial/muzzle

In some situations, death has been reported as an outcome of the adverse events listed above

For a complete listing of adverse reactions for firocoxib reported to the CVM see http://www.fda.gov/AnimalVeterinary/SafetyHealth/ProductSafetyInformation/ucm055394.htm

Information For Dog Owners: PREVICOX, like other drugs of its class, is not free from adverse reactions. Owners should be advised of the potential for adverse reactions and be informed of the clinical signs associated with drug intolerance. Adverse reactions may include vomiting, diarrhea, decreased appetite, dark or tarry stools, increased water consumption, increased urination, pale gums due to anemia, yellowing of gums, skin or white of the eye due to jaundice, lethargy, incoordination, seizure, or behavioral changes. Serious adverse reactions associated with this drug class can occur without warning and in rare situations result in death (see Adverse Reactions). Owners should be advised to discontinue PREVICOX therapy and contact their veterinarian immediately if

signs of intolerance are observed. The vast majority of patients with drug-related adverse reactions have recovered when the signs are recognized, the drug is withdrawn, and veterinary care, if appropriate, is initiated. Owners should be advised of the importance of periodic follow up for all dogs during administration of any NSAID.

Effectiveness: Two hundred and forty-nine dogs of various breeds, ranging in age from 11 months to 20 years, and weighing 13 to 175 lbs, were randomly administered PREVICOX or an active control drug in two field studies. Dogs were assessed for lameness, pain on manipulation, range of motion, joint swelling, and overall improvement in a non-inferiority evaluation of PREVICOX compared with the active control. At the study's end, 87% of the owners rated PREVICOX-treated dogs as improved. Eighty-eight percent of dogs treated with PREVICOX were also judged improved by the veterinarians. Dogs treated with PREVICOX showed a level of improvement in veterinarian-assessed lameness, pain on palpation, range of motion, and owner-assessed improvement that was comparable to the active control. The level of improvement in PREVICOX-treated dogs in limb weight bearing on the force plate gait analysis assessment was comparable to the active control. In a separate field study, two hundred fifty-eight client-owned dogs of various breeds, ranging in age from 10.5 weeks to 16 years and weighing from 7 to 168 lbs, were randomly administered PREVICOX or a control (sham-dosed-pilled) for the control of postoperative pain and inflammation associated with soft-tissue surgical procedures such as abdominal surgery (e.g., ovariohysterectomy, abdominal cryptorchidectomy, splenectomy, cystotomy) or major external surgeries (e.g., mastectomy, skin tumor removal <8 cm). The study demonstrated that PREVICOX-treated dogs had significantly lower need for rescue medication than the control (sham-dosed-pilled) in controlling postoperative pain and inflammation associated with soft-surgery. A multi-center field study with 256 client-owned dogs of various breeds, and ranging in age from 1 to 11.9 years in the PREVICOX-treated groups and 0.7 to 17 years in the control group was conducted. Dogs were randomly assigned to either the PREVICOX or the control (sham-dosed-pilled) group for the control of postoperative pain and inflammation associated with orthopedic surgery. Surgery to repair a ruptured cruciate ligament included the following stabilization procedures: fabellar suture and/or imbrication, fibular head transposition, tibial plateau leveling osteotomy (TPLO), and 'over the top' technique. The study (n = 220 for effectiveness) demonstrated that PREVICOX-treated dogs had significantly lower need for rescue medication than the control (sham-dosed-pilled) in controlling postoperative pain and inflammation associated with orthopedic surgery.

Animal Safety: In a targeted animal safety study, firocoxib was administered orally to healthy adult Beagle dogs (eight dogs per group) at 5, 15, and 25 mg/kg (1, 3, and 5 times the recommended total daily dose) for 180 days. At the indicated dose of 5 mg/kg, there were no treatment-related adverse events. Decreased appetite, vomiting, and diarrhea were seen in dogs in all dose groups, including unmedicated controls, although vomiting and diarrhea were seen more often in dogs in the 5X dose group. One dog in the 3X dose group was diagnosed with juvenile polyarteritis of unknown etiology after exhibiting recurrent episodes of vomiting and diarrhea, lethargy, pain, anorexia, ataxia, proprioceptive deficits, decreased albumin levels, decreased and then elevated platelet counts, increased bleeding times, and elevated liver enzymes. On histopathologic examination, a mild ileal ulcer was found in one 5X dog. This dog also had a decreased serum albumin which returned to normal by study completion. One control and three SX dogs had focal areas of inflammation in the pylorus or small intestine. Vacuolization without inflammatory cell infiltrates was noted in the thalamic region of the brain in three control, one 3X, and three 5X dogs. Mean ALP was within the normal range for all groups but was greater in the 3X and 5X dose groups than in the control group. Transient decreases in serum albumin were seen in multiple animals in the 3X and 5X dose groups, and in one control animal. In a separate safety study, firocoxib was administered orally to healthy juvenile (10-13 weeks of age) Beagle dogs at 5, 15, and 25 mg/kg (1, 3, and 5 times the recommended total daily dose) for 180 days. At the indicated (1X) dose of 5 mg/kg, on histopathologic examination, three out of six dogs had minimal periportal hepatic fatty change. On histopathologic examination, one control, one 1X, and two SX dogs had diffuse slight hepatic fatty change. These animals showed no clinical signs and had no liver enzyme elevations. In the 3X dose group, one dog was euthanized because of poor clinical condition (Day 63). This dog also had a mildly decreased serum albumin. At study completion, out of five surviving and clinically normal 3X dogs, three had minimal periportal hepatic fatty change. Of twelve dogs in the 5X dose group, one died (Day 82) and three moribund dogs were euthanized (Days 38, 78, and 79) because of anorexia, poor weight gain, depression, and in one dog, vomiting. One of the euthanized dogs had ingested a rope toy. Two of these 5X dogs had mildly elevated liver enzymes. At necropsy all five of the dogs that died or were euthanized had moderate periportal or severe panzonal hepatic fatty change; two had duodenal ulceration; and two had pancreatic edema. Of two other clinically normal 5X dogs (out of four euthanized as comparators to the clinically affected dogs), one had slight and one had moderate periportal hepatic fatty change. Drug treatment was discontinued for four dogs in the 5X group. These dogs survived the remaining 14 weeks of the study. On average, the dogs in the 3X and 5X dose groups did not gain as much weight as control dogs. Rate of weight gain was measured (instead of weight loss) because these were young growing dogs. Thalamic vacuolation was seen in three of six dogs in the 3X dose group, five of twelve dogs in the 5X dose group, and to a lesser degree in two unmedicated controls. Diarrhea was seen in all dose groups, including unmedicated controls. In a separate dose tolerance safety study involving a total of six dogs (two control dogs and four treated dogs), firocoxib was administered to four healthy adult Beagle dogs at 50 mg/kg (ten times the recommended daily dose) for twenty-two days. All dogs survived to the end of the study. Three of the four treated dogs developed small intestinal erosion or ulceration. Treated dogs that developed small intestinal erosion or ulceration had a higher incidence of vomiting, diarrhea, and decreased food consumption than control dogs.

One of these dogs had severe duodenal ulceration, with hepatic fatty change and associated vomiting, diarrhea, anorexia, weight loss, ketonuria, and mild elevations in AST and ALT. All four treated dogs exhibited progressively decreasing serum albumin that, with the exception of one dog that developed hypoalbuminemia, remained within normal range, Mild weight loss also occurred in the treated group. One of the two control dogs and three of the four treated dogs exhibited transient increases in ALP that remained within normal range.

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^{*}Sham-dosed (pilled)

^{**}One dog had hemorrhagic gastroenteritis





Temporary insanity

Going paperless? Help staff work through the dark days as they learn new ways.

by Kimberly A. Smith

t first glance, the primary challenges in implementing an electronic health record (EHR) system seem to be technological:

- How many workstations do we need?
- Where do we need to put the printers?
- How are we going to access our old paper records?
- How are we going to keep dog hair out of the computers?

Those and a thousand other questions will keep you busy for months. That is only one side of the story, however.

A smooth EHR implementation requires attention to the central and often neglected component: the people who will be using the system.

Whether you are still knee-deep in paper or are looking for ways to get the most out of your paperless system, two questions can help you take your practice to the next level:

- What are the typical reactions to changes imposed by an EHR system?
- What can you do to address them?

In general, people do not like to change what they do or how they do it. Because an EHR system forces change in every job role in the practice, you will need to prepare to address a variety of behaviors, ranging from stubborn resistance to abject helplessness.

Fortunately, these behaviors are relatively predictable. A review of research literature published in the *Journal of Organizational Change Management*



Change erodes competence, confidence and

self-worth. As staff learn new ways,

competence returns and morale takes off.

describes a consistent pattern that occurs in response to change.

The change curve

This pattern, known as the change curve, shows a drop in morale after a change is introduced. As the change is accepted, morale typically returns to, and sometimes exceeds, pre-change levels (Elrod & Tippett, 2002).

Why would converting from paper records to electronic records cause morale to drop? Lorenzi and Riley observe, "All change involves loss. In many cases, change requires at the minimum [emphasis added] that individuals



give up familiar routines" (Lorenzi & Riley, 2000).

When people lose familiar routines, they experience loss of competence. Tasks that were practically automatic now require effort and ongoing refinement and troubleshooting.

As people progress through the change curve, they may go through a phase in which they resist the change. Resistance can indicate an underlying issue, such as fear, and can show itself in many ways, ranging from refusal to use the system to actual sabotage.

I know this from experience because I once was the target of a doctor's screaming tirade. In retrospect, I realize his anger was founded in fear — fear of not knowing how to do his job safely and

References



To read these papers, go to *Trends digital edition* (www.trends.aahanet.org) and click on the titles.

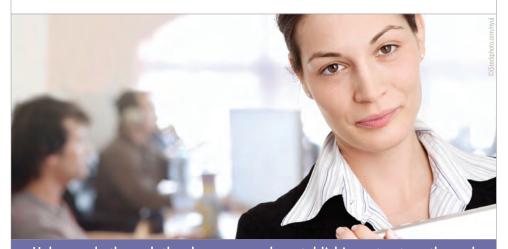
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Managing change: an overview. Lorenzi NM, Riley RT. *Journal of the American Medical Informatics Association* 2000;7(2):116–124.

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Help people through the change curve by establishing a trustworthy and respected project champion who can use good communication and people skills to guide staff through the implementation process.

effectively on the new system and fear of appearing incompetent in front of his colleagues and subordinates.

When everyone on staff is feeling the same anxiety and fear about a new system, and the practice culture allows such tirades from owners and others, the scene is set for plummeting morale.

Fear is not the only psychological factor that causes people to resist change. Irrational ideas and distortions, such as "To be a worthwhile person, I must be thoroughly competent in everything I do," are directly correlated with resistance to change (Bovey & Hede, 2001).

WADITW syndrome

Then, there is the "We've always done it this way" (WADITW) syndrome, characterized by repetition of this phrase every step of the way.

People suffering from this syndrome will say, "We've always done it this way!" occasionally prefaced with the word but — as if historical precedence is justification not to modify a process.

"We've always done it this way" is practically pathognomonic for resistance to change, and it can strike at every level in an organization: owners, directors, managers or staff.

Those in charge of the EHR implementation should invest extra effort in working with everyone affected by this syndrome.

Fear and resistance may be natural reactions to change, but there are methods and techniques you can use to move staff through the change curve.

The two things

The first strategy is to establish a project champion, "one who fights on behalf of another, or on behalf of any cause" (The Oxford English Dictionary, 1989).

In fact, "A champion is an absolute necessity for a successful implementation" (Lorenzi, Kouroubali, Detmer & Bloomrosen, 2009).

The champion's role is not simply to act as a cheerleader. Instead, the champion helps people work through their fears and irrational thoughts about change. This is not deep psychology. Rather, the champion helps others take the long view, to understand the benefits and advantages the new EHR system offers over the old paper processes.



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A champion is not merely a

cheerleader.

The champion also addresses concerns and corrects misconceptions.

Who is the ideal champion for an EHR implementation? Look for a person who is respected by the practice owners as well as both the professional and nonprofessional staff. The champion must have good people skills and must be technologically literate.

In some practices, this may be a veterinarian; in other practices, it may be a senior technician.

In addition to the project champion, regular communication with staff is essential. In the absence of communication, rumors will develop, amplifying staff's concerns and fears. Communication can occur in many forms, such as meetings, newsletters and Web pages. Regardless of the form, the ideal communications are timely, informative and trustworthy.

A team effort

Even the most enthusiastic practice team will experience loss of competence, fear or anxiety, and irrational thoughts when confronted by change. No one on the team is immune from these drivers of resistance.

Count on the fact that staff will resist the change from paper to electronic records. Recognize that resistance is usually grounded in fears and misplaced ideas, and help people through the change curve by establishing a trustworthy and respected project champion who can use good communication and people skills to help guide staff through the implementation process.

Kimberly A. Smith, PhD, MT(ASCP), CPHIMS, is a lecturer at the Health Information Technology Institute of the University of Texas College of Natural Sciences.



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Advantage Multi® for Dogs (imidacloprid + moxidectin) Topical Solution

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

WARNINGS: For the first 30 minutes after application: Ensure that dogs cannot lick the product from application sites on themselves or other treated dogs, and separate treated dogs from one another and from other pets to reduce the risk of accidental ingestion. Ingestion of this product by dogs may cause serious adverse reactions including depression, salivation, dilated pupils, incoordination, panting and generalized muscle tremors. In avermectin sensitive dogs, the signs may be more severe and may include coma and death. CONTRAINDICATIONS: Do not administer the product orally. Do not use this product (containing 2.5% moxidectin) on cats. HUMAN WARNINGS: Children should not come in contact with the application site for two (2) hours after application.





Moving into Management





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In our first-ever collaboration, *Trends* and NAVTA asked technicians to tell us their best tips for doing everything better, from career development to obesity counseling to cleaning up, well, you know...

You delivered more than we bargained for — hundreds of tips and tricks, protocols, insights and attitude-adjusters! So many, in fact, we've created a new space for them. You'll find selected Tech2Tech Tips in *Trends* throughout the year.

You'll find even more tips at *Trends online (www.trends.aahanet.org)* > Share Your Stories.

Be confident and have support groups at home and work.

— Marissa Genereux, RVT, Deming Animal Clinic, Deming, N.M.

Complete a day or weekend course on communication and conflict resolution to learn new skills for handling difficult situations. That way you'll have more of an idea if you are ready to make that move into middle management.

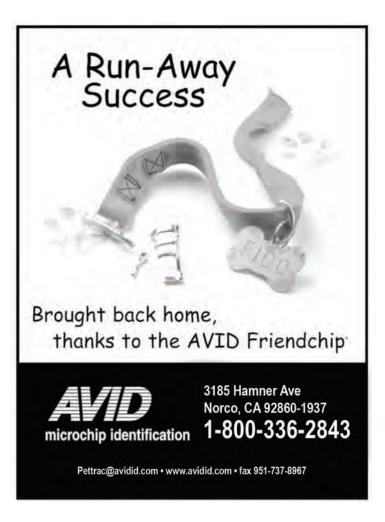
— Lisa Thomson, VTS, Vancouver, B.C.

Don't forget what it's like to be the newbie or the low person on the food chain.

My employees realize there is nothing I ask them to do that I would not do myself. Most important is to treat employees with respect and to make sure they realize they are part of the team.

— Amy Nunnally, LVMT, Lab Manager, Vanderbilt University Medical Center, Murfreesboro, Tenn.





Advantage Multi® For Dogs

(imidacloprid + moxidectin) Topical Solution

BRIEF SUMMARY: Before using *Advantage Multi for Dogs*, please consult the product insert, a summary of which follows:

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

INDICATIONS: Advantage Multi for Dogs is indicated for the prevention of heartworm disease caused by Dirofilaria immitis, for the killing of adult fleas and for the treatment of flea infestations (Ctenocephalides felis) and is also indicated for the treatment and control of the following intestinal parasites: Hookwom (Ancylostoma caninum and Uncinaria stenocephala),Roundworm (Toxocara canis and Toxascaris leonina), and Whipworm (Trichuris vulpis).

CONTRAINDICATIONS: Do not administer these products orally. Do not use the Dog product (containing 2.5% moxidectin) on cats.

WARNINGS

For the first 30 minutes after application:

Ensure that dogs cannot lick the product from application sites on themselves or other treated dogs, and Separate treated dogs from one another and from other pets to reduce the risk of accidental ingestion. Ingestion of this product by dogs may cause serious adverse reactions including depression, salivation, dilated pupils, incoordination, panting, and generalized muscle tremors.

In avermectin sensitive dogs, the signs may be more severe and may include coma and death.

HUMAN WARNINGS: Not for human use. Keep out of the reach of children.

Children should not come in contact with the application site for two (2) hours after application. Avoid contact with eyes and skin. Wash hands thoroughly with soap and warm water after handling. People with known hypersensitivity to benyl alcohol, moxidectin, or imidacloprid should administer the product with caution. Call a poison control center or physician for treatment advice.

PRECAUTIONS: Do not dispense dose applicator tubes without complete safety and administration information Use with caution in sick, debilitated, or underweight animals. Avoid oral ingestion. The safety of Advantage Multi for Dogs has not been established in breeding, pregnant, or lactating dogs. The safe use of Advantage Multi for Dogs has not been established in puppies and dogs less than 7 weeks of age or less than 3 lbs. body weight. Prior to administration of Advantage Multi for Dogs, dogs should be tested for existing heartworm infection. At the discretion of the veterinarian, infected dogs should be treated with an adulticide to remove adult heartworms. Advantage Multi for Dogs is not effective against adult D. immitis. While the number of circulating microfilariae may decrease following treatment, Advantage Multi for Dogs is not effective for microfilariae clearance.

Adverse Reactions – Adverse reactions observed in dogs have included pruritus, residue, medicinal odor, lethargy, inappetence, hyperactivity, gastrointestinal, neurological, dermal signs, bloody diarrhea, poor appetite, panting, labored breathing, acute pulmonary edema, hives, rash, and swollen face and ears. For a copy of the Material Safety Data Sheet (MSDS) or to report adverse reactions call Bayer Veterinary Services at 1-800-422-9874.

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ARX041410 15069

TECH2TECH TIPS / LEARNING CURVE

It's a natural progression for some, not so much for others. Make small changes at first to keep from ruffling too many feathers, and watch carefully for reactions.

— Cindy Mooney, LVT/CVT,
Portland, Ore.



Within a month of starting a supervisory position, meet one on one with every employee and doctor. It really helps to set expectations and to understand the needs and challenges of staff.

— Steve Lund, Kanab, Utah

It's all about your attitude and how you approach people.

— Tera Kilpatrick, LVT, Bonney Lake, Wash.





- Take initiative
- Show that you are interested in helping a practice grow
- Be a leader
- Always teach others
- Do not get involved in gossip circles
- Offer to take on new tasks

— Kristin P Coppola, CVT, Head Technician, Millbury, Mass. Always act and perform appropriately for the position you want.

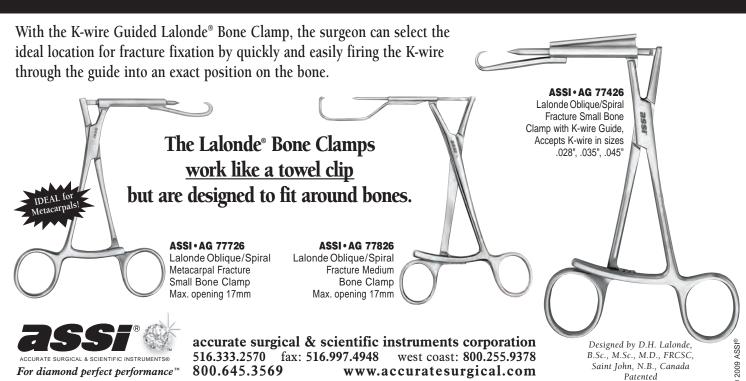
— Tammy Gaspard, CVT, Animal Medical Center, Downingtown, Pa.

You can take seminars and read books, but, honestly, the best is learning from your mistakes.

— Amy Breton, CVT, Head Technician of Emergency, VESCONE, Tewksbury, Mass.

Mentorship! — H. Mattinson, LVT, Huntington, N.Y.

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speakout

continued from page 11

must be defined, and then it is up to the manager to see they are achieved.

Problems can arise if managers put their needs ahead of what the practice needs. A lot of responsibility comes with the new "power." Managers who are self-centered can be a real problem; they need to be caretakers. They are there to help everyone do their job. If it is done wrong, then we have not educated the employee well enough or we may need a different employee. The job is to give owners more time to work or relax. Managers need to avoid cockiness and self-serving, jealous or greedy behavior.

Owners must remember that young people come and go with regularity and may not have well-developed personal ethics.

If we are going to pay 3% in management fees, then we pay \$30,000 per \$1 million gross. Some managers may not feel this is an adequate reward (just a glorified paper pusher without overtime). Life balance may become more elusive, as it is with the owner doctors.

Owners must realize and balance the rewards and the risks. Do not be naive; employees make mistakes that cost the owners millions. Owners must still be in control, pay attention to what's happening and manage the manager.

Managers must think about what the practice needs rather than what each person wants or what they "need." They must be tough enough to get the job done and stay within the guidelines. They must meet the goals.

From past experience of being the owner of six hospitals, we have had managers who stole, embezzled and assaulted and were obstructive passive-aggressive. We have had one who was greedy and wanted to be paid like a doctor owner. One became jealous once they knew what the doctor owners made and how.

Some more self-centered managers became power hungry and treated others as the little people. After we fired one, they retaliated by turning us in to the Occupational Safety and Health Administration (OSHA) radiation board and state unemployment and fair practices; filed a worker's compensation claim for stress; stole all the employee and payroll records; and put passwords in the computer. That person also stole a backup tape (all clients and financial records). We now keep all this copied and off-site.

Managers mostly do HR and financial accounting. Most DVMs are averse to HR responsibilities. Better know the state and federal hiring and firing laws. You cannot be prejudiced against, for example, handicapped persons or old people, or you'd better look out.

Know how to set up a file and keep documents. Keep payroll records. See that all employees take their breaks and lunches, and even sign them off each time they do so... or face the state labor board. If you have a hospital manual, you'd better know it and stick to it! You should know OSHA rules, and make sure you receive sexual harassment training. A bad firing or firing a protected person, a misspoken remark, or an unwanted flirt or touch by an employee can cost millions! Make sure your insurance covers all these.

Managers can step up to hospital administrators. Now, they really have the power to tell the doctors, and even the owners, what to do.

Financial responsibilities

There are solid goals to be met! Managers must make it happen.

- 1. The budget needs to be within the range of percentages in each category so that, in the end, it totals 100%.
- 2. Insurance hospital package and the add-ons (shopped yearly) must be integrated with personal lines (e.g.,

speakout

hospital; liability; umbrellas; health; dental; optical; life; disability; auto; house; worker compensation; error and omissions; specials for boats, planes and vacation houses).

- 3. HR salaries must be within 1% of the goal (e.g., control schedules, vacations, sick days, wage rate, wage raises).
- 4. Drug purchases must be within 1% of the goal; oversee who orders.
- 5. Write the checks for bills, balances, daily deposits, month-end books and accounts receivables and payables. The manager should get monthly flash reports of cash positions and profit/ loss within 7 days of the end of month. Coordinate with the accountant, and do quarterly reports and year-end taxes for corporations (tax laws; e.g., is it a repair or an improvement?).
- 6. Confer with lawyers on setup of business, firings and any problems. Wills, trusts, corporate minutes and memoranda should show your practice works as a corporation and not a personal piggy bank.
- 7. Oversee advertising, maintenance, meeting with vendors (specials) and buying new equipment.
- 8. See that the doctors get paid a minimum of 25% of production as salary, 1-2% management, 10% profit, and payments on leases of real estate and even equipment. Minimal! Or else get a new manager.

Just some thoughts; hope it will help. ■

- Tim Metzger, DVM Rainbow Veterinary Hospital, Tustin, Calif.



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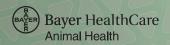


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Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian. In animal safety studies, isolated incidences of vomition and inappetence were reported.



Baytril[®]

(enrofloxacin)

Antibacterial Tablets For Dogs and Cats

BRIFF SUMMARY

Before using Baytril Tablets, please consult the product insert, a summary of which follows

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Federal law prohibits the extralabel use of this drug in food-producing animals.

INDICATIONS:

INDICATIONS.
Bayril® (brand of enrofloxacin) Antibacterial Tablets are indicated for the management of diseases associated with bacteria susceptible to enrofloxacin, Baytril Antibacterial Tablets are indicated for use in dogs and cats.

CONTRAINDICATIONS:

Enrofloxacin is contraindicated in dogs and cats known to be hypersensitive to quinolones.

Embourable is colinal analysis and calculations and calculations of the physicistic organization of pullipations. Do more applications of the studies discussed under the section on Arinnia Safety Summary, the use of emroflocation is contraindicated in small and medium breeds of dogs during the rapid growth phase to be contrained to the small so and analysis of the section of the

ADVERSE REACTIONS:

AUVENS: HEALTIMES:
Digs: Two of the 270 (0.7%) dogs treated with Baytri® (brand of enrofloxacin) Tablets at 5.0 mg/kg per day in the clinical field studies exhibited side effects, which were apparently drug-related. These two cases of womthon were self-imitting.

Assess or Vollation Were sear-initioning.

Post-Approval Experience: The following adverse experiences, although rare, are based on voluntary post-approval adverse drug experience reporting. The categories of reactions are listed in decreasing order of frequency by body system.

Gastrointestinat, amorexia, diarrhea, vomitting, elevated liver enzymes

Neurologic: ataxia, seizures Behavioral: depression, lethargy, nervousness

Cats: No drug-related side effects were reported in 124 cats treated with Baytril® (brand of enrofloxacin) Tablets at 5.0 mg/kg per day for 10 days in clinical field studies.

entroloxical) if ables at 30 m/g/kg per day for 10 days in Climical nebt solution. Post-Approval Experience: The following adverse experiences, although rare, are based on voluntary post-approval adverse drug experience reporting. The categories of reactions are listed in decreasing order of frequency by body system. Ocular: Mydriass, retinal depeneration (retinal atrophy, attenuated retinal vessels, and hyperreflective tapeta have been reported), loss of vision. Mydriasis may be an indication of impending or existing retinal changes. tapeta have been reputed, 1000 retinal changes. Gastrointestinal: vomiting, anorexia, elevated liver enzymes, diarrhea

oassrointesaniar. Vornings, archeval, elevated river enzymes, diamea Neurologic: attaixi, seizures Behavioral: depression, lethargy, vocalization, aggression For medical emergencies or to report adverse reactions, call 1-800-422-9874.

ANIMAL SAFETY SUMMARY:

ANIMAL SAFETY SUMMANY:

Dags: Adult dops receiving enrolloxacin orally at a daily dosage rate of 52 mg/kg for 13 weeks had only isolated incidences of vormition and inappetence. Adult dops receiving the tablet formulation for 30 consecutive days at a daily treatment of 25 mg/kg did not exhibit significant clinical signs nor were there effects upon the clinical chemistry, hernatological or histological parameters. Bully doses of 125 mg/kg for up to 11 days induced womition, inappetence, depression, difficult locomotion and death while adult dogs receiving 50 mg/kg/day for 14 days had clinical signs of vormition and inappetence. Adult dogs dosed intramuscularly for three treatments at 12.5 mg/kg for up to 11 days induced womition, inappetence, depression, difficult locomotion and death while adult dogs dosed intramuscularly for three treatments at 12.5 mg/kg for up to 11 days induced womition, inappetence, and the dogs dosed intramuscularly for three treatments at 12.5 mg/kg for 30 at 12.5 mg/kg had 12 to bour intervals, did not exhibit either significant clinical signs of verificult or 15 to 28 week old growing pulpies with daily dosage rates of 25 mg/kg has induced abnormal carriage of the carpal joint and weakness in the bindquarters. Significant improvement of clinical signs is observed following drug withdrawal. Microscopic studies have dentified elsons of the articular cartilage following 30 day treatments at either 5, 15 or 25 mg/kg in this age group. Clinical signs of difficult ambulation or associated cartilage lesions have not been observed in 29 to 34 week old pupples following daily treatments of 25 mg/kg for 30 consecutive days nor in 2 week old pupples was observed. No adverse effects were observed on reproductive parameters when male dogs received 10 consecutive daily treatments of 15 mg/kg/day at 3 intervals (90, 45 and 14 days) prior to breeding or when female dogs received 10 consecutive daily treatments of 15 mg/kg/day at 3 intervals (90, 45 and 14 days) prior to breeding or when female dogs re

days), and during lactation (the first 28 days).

Cats: Cats in age ranges of 3 to 4 months and 7 to 10 months received daily treatments of 25 mg/lg for 30 consecutive days with no adverse effects upon the clinical chemistry, hematological or histological parameters. In cats 7-10 months of age treated daily for 30 consecutive days, 2 of 4 receiving 5 mg/kg, 3 of 4 receiving 15 mg/kg, 2 of 4 receiving 5 mg/kg and 1 of 4 nontreated controls experienced occasional vomition. Five to 7 months of age treated daily for 30 consecutive days, 2 of 4 receiving 5 mg/kg and 10 of 4 nontreated controls experienced occasional vomition. Five to 7 month old cats had no side effects with daily treatments of 15 mg/kg for 30 days, but 2 of 4 animals had articular cardiagle-lesions when administered 25 mg/kg port agiv 703 days, but 20 of 4 animals had articular cardiagle-lesions when administered 25 mg/kg port agiv 703 days, but 20 mg/kg for 6 days had clinical signs of vomition, inappetence, incoordination and convolsions, but they returned to normal.

Enrofloxacin was administered to thirty-tive (8 per group), six- to eight-month-old cats at does of 0, 5, 20, and 50 mg/kg of body weight or greater caused salkuation, vomition, and depression. Additionally, dosing at 20 mg/kg body weight or greater caused salkuation, vomition, and depression of ophthalmologic examination (change in color of the funds, central or generalized retinal degeneration), abnormal electrorelinggrams (including blindness), and diffuse light microscopic changes in the retina.

DHOUS INTERACTIONS:

Compounds that contain metal cations (e.g., aluminum, calcium, iron, magnesium) may reduce the absorption of some quinolone-class drugs from the intestinal tract. Concomitant therapy with other drugs that are metabolized in the liver may reduce the clearance rates of the quinolone and the other drug.

Dogs. Enrollocacin has been administered to dogs at a daily dosage rate of 10 mg/kg concurrently with a wide variety of other health products including antherimities (practice) retained to the mg/kg concurrently with a wide variety of other health products including antherimities (praziquantel, febantel, sodium disophenol), insecticides (tenthion, pyrethrins), heartworn preventatives (dieth/carbamazine) and other antibiotics (ampicillin, gentamicin sulfate, penicillin, dihydrostreptomycin), No incompatibilities with other drugs are known at this time.

Cats: Enrolloxacin was administered at a daily dosage rate of 5 mg/kg concurrently with antherimities (praciquantel. febantel), an insecticide (proposur) and another antibacterial (ampicillin). No incompatibilities with other drugs are known at this time.

WARNINGS:
For use in animals only. In rare instances, use of this product in cats has been associated with Retinal Toxicity. Do not exceed 5 mg/kg of body weight per day in cats. Safety in breeding or pregnant cats has not been established. Keep out of reach of children.

Avoid contact with eyes. In case of contact, immediately flush eyes with copious amounts of water for 15 minutes. In case of dermal contact, wash skin with soap and water. Consult aphysician if irritation persists following coular or dermal exposure, Individuals with a history of hypersensitivity to hours after excessive exposure to quindones the described and only this product. In humans, there is a risk of user photosensitization within a few hours after excessive exposure to quindones. If excessive excidental exposure cours, avoid direct sunight. For customer service or to obtain product information, including Material Safety Data Sheet, call 1-800-633-3796.

PRECAUTIONS:

PRECAUTIONS:

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

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

The use of fluoroquinolones in cats has been reported to adversely affect the retina. Such products should be used with caution in cats.

U.S. Patent No. 4,670,444

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your questions answered



by Katherine Dobbs, RVT, CVPM, PHR



What is the best way for me to handle an angry or upset client on the telephone?

Sometimes your body language can help you handle an angry client in person at the front desk or in an examination room. However, on the telephone, you only have your words and tone of voice to help you through the situation. There are also times when clients find it easier to be angry and belligerent through the telephone wire rather than in front of your face. This can create some very uncomfortable if not impossible situations for the team members who handle these calls. At the same time, you want to retain or gain these callers for your clientele.

The most important thing to remember is to let the client talk! Often the mere act of venting frustration will help the client to calm down, and you may end up with an apology at the end of his tirade. This is perhaps difficult to do if you are in the middle of a busy day and feel your time is limited. However, this is no time to rush, and it may take teamwork to free up a member of the staff to be the attentive ear that this upset client needs. When he has finished his ranting, repeat his main concerns back to him to demonstrate that you have heard and understood the complaint. Then ask him, in a calm yet attentive voice, how you can help to rectify the situation. He needs to know that you are listening and focused. Be careful not to apologize on behalf of the practice, as this could be viewed as an admission of guilt. Unless you have completed a thorough investigation of this client's complaint, you have no way of knowing who is at fault, if, in fact, anyone is.

Acknowledge the client's feelings. You could say something like, "I can tell that you're frustrated; what would you like me to do to help?" or, "It is unfortunate that you feel that way; what can we do for you at this point?" or, "I understand how upset you are about (pet's name) illness; let me see what I/we can do for you."

Above all, remain calm, and never become emotional. Do not participate in a shouting match or battle of wits. The client might not "always be right," but he does need to feel validated and understood.



Enhancing Your Telephone Skills (CD-ROM), by Mark Opperman, CVPM (Lifelearn 1999)

The Veterinary Receptionist's Handbook, Second Edition, by M. T. McClister, DVM, and Amy Midgley (Veterinary Medicine Publishing Group 2000)



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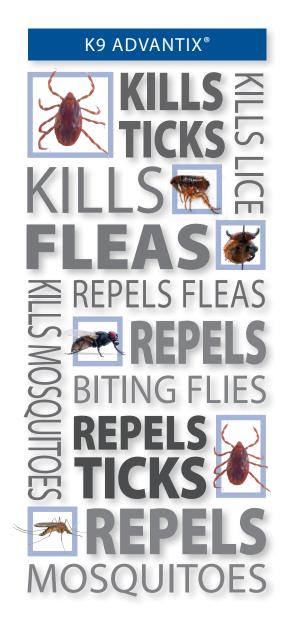
AAHA's Executive Director Dr. Mike Cavanaugh and other key AAHA staff congratulate some of the InTouch staff on receiving the approval during a cake cutting ceremony at AAHA's Yearly Conference in Long Beach.



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