

CANADIAN VET

A NEWSMAGAZINE FOR VETERINARIANS AND THEIR COLLEAGUES

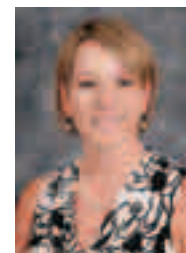


Dr. Lynn Smart, equine clinical associate, and Drs. Rochelle Lewis and Vicki Patrie, taking care of equine patients in the backstretch at Saskatoon's Marquis Downs

Michael Raine for the Western College of Veterinary Medicine

Treating good puppies with bad hips

By Jennifer L. Wardlaw, DVM, MS, DACVS



Paying special attention to “at risk” puppies during initial examination by asking pertinent questions about their normal activity and keeping them lean and on a balanced diet to avoid adverse nutritional influences is a key component to managing these patients. An Ortolani and Barden exam should be performed in large or giant breed puppies and those that have known familial histories.

A radiographic diagnosis of hip dysplasia is more difficult in younger dogs but can be performed using various techniques; the extended hip view is used by the Orthopedic Foundation for Animals (OFA) and distraction radiography is used in the PennHIP Program. Certification with the OFA cannot be done

Treating bad hips continues on page 5

Inside

MAY/JUNE 2012
Vol.7, No.3

- 3 Canadian Vet Advisory Board
- 4 VetLaw
- 10 Buddy's story highlights need for stricter legislation
- 11 Lyme disease risk increasing with global warming
- 12 Diagnosis and management of otitis externa
- 13 Treatment of clinical mastitis: strategies to improve economics of therapy
- 16 For Pet's Sake
- 18 The private sale: are you thinking of selling your practice privately?
- 18 Clinical pain management strategies
- 21 Retaining employees: what's in your toolbox?
- 23 Best Practices
- 23 OVMA 2012 Conference
- 24 Dogs in workplace relieve stress
- 25 Industry News
- 26 Continuing Veterinary Education Calendar
- 26 CVMA News

Antimicrobial resistance and biosecurity: what is the link?

By Simon J. Otto BSc, DVM, PhD



Biosecurity practices are commonplace in today's livestock production systems. However, when people consider the term “biosecurity” and its related practices, they do not immediately take into account antimicrobial use and antimicrobial resistance (AMR). Antimicrobials are used widely in livestock production at the individual animal or group level for the treatment of sick animals, prevention of disease, and growth promotion to enhance group performance.

Antimicrobial resistance occurs when bacteria withstand the effects of an antimicrobial and continue to grow and multiply uninhibited. Susceptible bacteria acquire resistance through genetic modification, creating resistance determinants. Exposure to antimicrobials creates selection pressure for bacteria to develop and acquire resistance determinants and for resistant bacteria to proliferate at the expense of susceptible bacteria. This “survival of the fittest” scenario is

Antimicrobial resistance continues on page 6

CAAT offers life-changing adventure, challenges, and rewards

By Robert Spooner, DVM



About a year ago, I found myself standing under a Canadian Tire-style 10 x 10 foot canopy in the middle of nowhere on a day of endless rain, spaying a dog while her owner and a group of friends looked on. Behind me Jen, my fellow Canadian Animal Assistance Team (CAAT) veterinarian, was doing the same while Chris and Annette, two of the most incredible, hard working techs with whom I've had the pleasure to work, huddled under as much remaining shelter as possible, while closely monitoring our patients. Sleeping between Jen and me, two pups were curled up on a patch of dry ground not realizing they were next on the surgery list.

The four of us were a contingent of the CAAT volunteering our services in northern Botswana. We were there assisting the Maun Animal Welfare Society

CAAT continues on page 8

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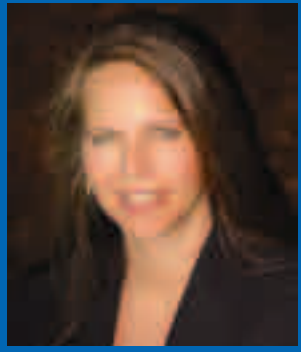


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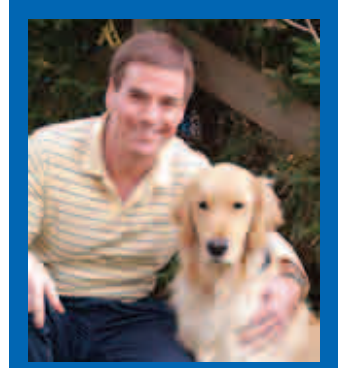
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A NEWSMAGAZINE FOR VETERINARIANS AND THEIR COLLEAGUES

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Published six times annually by K2 Animal Health Publishing, 3662 Sawmill Valley Drive, Mississauga, Ont L5L 2P6

Telephone: 905-607-7338 **Toll-free:** 1-888-607-7338 **Fax:** 905-607-0181

Each clinical article in *Canadian Vet* is reviewed for accuracy by the veterinarian who presented at the meeting.

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VetLaw

Ladies and gentlemen of the jury: the veterinarian's role in suspected animal abuse cases

Recent media reports have raised the issue of the role that the veterinary practitioner might play in cases of suspected animal abuse. Most readers will be aware that the Criminal Code in Canada has been amended in recent years, similar to most states in the United States, to create opportunities for prosecutors to seek increased penalties where a person is convicted of the wilful neglect of an animal. In Lively, Ontario, the Walden Animal Hospital was brought in with an obvious case of abuse when a dog was presented with gunshot wounds in what appears to be a failed attempt by its owner at euthanasia; the clinic is to be applauded for its efforts in creating a fund in honour of the dog which is dedicated to the medical care of abused animals. In another media report, a Denver cleaning company has been ordered to pay damages in the amount of \$65,000 to a dog owner after the court found the company negligent for leaving a dog to die after it had been struck by a car; the dog had escaped its home through a door left open by the cleaning firm employees and was struck by a motor vehicle and left alone and injured in the home. Both of these cases point to the renewed and enhanced status of animals (particularly companion animals) in our society and creates some obligations and responsibilities for the veterinary professional.

Duty to report

One of the most difficult ethical dilemmas presented to the veterinarian is whether or not to report cases of suspected abuse to appropriate officials; to do so, in some provinces, could be construed as a breach of the duty of confidentiality. In Alberta there appears to be an ethical requirement to report suspected abuse while Quebec makes such reporting a mandatory legal requirement. In Ontario, the reporting of such cases is a specific exemption to the, otherwise, requirement to keep all information about patients and their owners on a confidential basis. The general consensus seems to be that such reporting would be permitted.

In many jurisdictions, legislation has been introduced to provide for mandatory reporting of suspected abuse coupled with providing veterinary practitioners with immunity from criminal or civil actions for defamation so long as such reports are made in good faith.

“Animal abuse”

The principal problem with such cases is that there does not appear to be a universally accepted definition of what conduct constitutes “abuse”. Unless and until some form of objective standard is determined, prosecutors will have some difficulty in securing convictions given that opinions may vary as to whether or not the conduct complained of actually gave rise to abuse in the circumstances. Some advances have been made on this issue in recent years: Tufts University has developed an objective “scoring system” by which the practitioner can assess an animal based upon pre-determined aspects of the animal’s environment

and physical presentation to determine whether or not a particular threshold has been met. Atlantic Veterinary College in Charlottetown has done some work in a similar vein in the equine sector. Each of these projects will, no doubt, prove to be helpful as we continue to wrestle with these issues.

In my view, until such an objective standard is developed and accepted consistently by the courts, the roles of assisting in police or humane society investigations or serving as expert witnesses in criminal proceedings will be compromised.

Allegations of abuse

The veterinary community must also recognize that conduct within the veterinary clinic is not immune from scrutiny when it comes to alleged abuses. For instance, in the event that a particular animal is not provided with appropriate analgesics for pain post-operatively, a client could potentially raise the question of whether or not such conduct constitutes a form of abuse. As well, there are instances where physically striking an animal for behavioural reasons has been raised in disciplinary proceedings before provincial licencing bodies. When the federal laws were being considered for amendment there were several groups that sought exemptions from the new criminal provisions; the national government elected to not provide such exemptions for farmers, fisherman, hunters, and others. Similarly, veterinarians are not immune from such investigation. As such, prudent practice owners will remind all staff members, professional and laystaff, to conduct themselves in an appropriate manner so as to avoid such allegations which would be devastating for most clinics.

The acceptance of the notion of the human/animal bond in North American society has given rise to a number of legislative advances for the protection of animals. While there are a number of notorious cases (for instance, the conviction of NFL quarterback, Michael Vick, in a dog-fighting scheme) there are also many difficult cases that are presented to veterinarians on a daily basis. It is appropriate for practitioners to understand the legal implications of these changes in the law, and react accordingly.

Mr. Jack is Counsel at the law firm of Borden Ladner Gervais, LLP (“BLG”) with a mandate to serve the needs of the veterinary community and enhance it on a national basis. BLG is the largest law firm in Canada with offices strategically located in Vancouver, Calgary, Toronto, Ottawa, Montreal, and Waterloo Region. Mr. Jack chairs a focus group relating to veterinary legal matters within the firm’s Healthcare Group – BLG represents the first and only national legal firm that recognizes the veterinary profession in that way. He can be reached by email at dcjack@blg.com or by telephone at 1-800-563-2595.



Douglas C. Jack, B.A., LL.B.



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Treating bad hips continued from page 1

until two years of age, making it a difficult screening test for puppies unless they are severely affected. PennHIP requires certification to submit films as well as sedation or anesthesia of the patients, and three radiographs are mandatory. The distraction index is calculated with the percent of the femoral head that is luxated out of the acetabulum. A distraction index of greater than 0.3 is considered disease susceptible, but breed variation exists. This modality has been shown to be statistically predictable at 16 weeks of age.

Medical management is 80% successful and is clinically more helpful the earlier you begin. Weight control or reduction is the cornerstone to minimize the stress of the growing active joints. A regulated exercise program should be utilized but not overdone. Osteoarthritis (OA) disease-modifying agents or nutraceuticals can be started early. NSAIDs can safely be used in puppies after two months if pain is an issue. Consider postponing strict training until they are at least six months of age. Excessive force even on normal joints can cause OA. Exercise is good in moderation and will help reduce obesity as well as maintain a good range of motion. Low impact exercise can be used liberally including swimming, walking, obedience class, and leash training. Studies have shown that even with radiographic evidence of hip dysplasia at a young age, weight control and leash walking can dramatically increase the range of motion, exercise tolerance, and long-term function for years.

Nutraceuticals have been shown to be most beneficial in offsetting OA when given before inflammation starts. Since nutraceuticals have minimal if any side effects and have potential for a large impact, it is easy to prescribe them to owners who are willing. The key to understanding the options is to realize that the FDA does not regulate these products for efficacy or quality. It is vital that you find a company you like, believe in, and that has research to support their products and claims. If you are using a product and not seeing results, then try a new source.

Most nutraceuticals contain glucosamine and chondroitin sulfate in various forms, which are reportedly absorbed by the GI tract, become incorporated into joint tissues, and provide the necessary precursors to maintain cartilage health and decrease inflammation. Anecdotal reports, *in vitro* studies, and published clinical trials, indicate that these agents are effective in treating OA.

A combination of glucosamine, chondroitin sulfate (CS), decaffeinated tea polyphenols, and avocado/soybean unsaponifiables (ASU) is now available for dogs and cats. Tea polyphenols may have a positive effect on cartilage health and provide oxidative balance in the body. ASU, which are biologically active lipids, have

been shown to be more effective than chondroitin sulfate in inhibiting the expression of certain OA mediators responsible for cartilage breakdown. The combination of ASU with glucosamine and chondroitin sulfate decreased the expression of numerous pro-inflammatory mediators. This decrease in pro-inflammatory mediators seen with ASU added to CS and glucosamine is greater than that seen with CS and glucosamine alone.

The benefits of omega acid supplementation were discovered when dermatologic patients were experiencing relief from their OA. Maintaining a high content of the long chain omega-3 fatty acids EPA and DHA is the key with this nutraceutical. Omega-3s and

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omega-6s have different effects on the inflammatory response; omega-6 arachidonic acid is the precursor to more pro-inflammatory mediators while omega-3 EPA is a precursor to less potent inflammatory mediators. Omega-3s are readily available from several companies for veterinary as well as human products. Pet foods that contain them must be kept in a sealed bag to prevent drying out if stored for more than 30 days.

Other options for easy oral administration include green-lipped mussel, methyl-sulfonyl-methane, duralactin, and S-adenyl-L-methionine. Less research or anecdotal evidence exists for these but is continually being developed.

The use of joint nutraceuticals in dogs prior to the development of OA is controversial. No controlled studies have been reported that document the efficacy of nutraceuticals in preventing the development of OA. However,



The pubis symphysis is fused using cautery cranial to and beside the obturator foramen in puppies less than 20 weeks of age. This area is indicated by the box.

In puppies 10-12 months of age with laxity but no boney changes on radiographs, a Triple Pelvic Osteotomy should be considered. This dog has decreased acetabular coverage and palpable hip laxity bilaterally.

This radiograph is of the same patient after bilaterally staged TPOs 4 weeks apart. Note the left side is healed. The acetabular coverage is dramatically improved with the forced pelvic ventroversion.

because of their reported effects on improving cartilage matrix and reducing levels of inflammatory mediators within the joint, many clinicians have advocated the prophylactic use of joint nutraceuticals, particularly in athletic and large dogs that may be susceptible to joint injury.

There are also surgical options to diminish the effects of OA in puppies with hip dysplasia. The two surgical options are Juvenile Pubic Symphysiodesis (JPS) and Triple Pelvic Osteotomy (TPO). JPS is a simple procedure performed on puppies 12 to 20 weeks of age. The procedure fuses the pubic symphysis with electrocautery via a ventral midline incision. There are no implants and, with proper protection of the urethra and minimizing depth to avoid the colon, very few potential side effects. Electrocautery is used every 2-3 mm along the symphysis to cause thermal necrosis and premature closure. The pelvis continues to grow in all other planes while being static at the pubis, resulting in ventroversion of the acetabulum. This procedure is not readily detectable on OFA and PennHIP films and should therefore only be performed on animals that will be sterilized to avoid certifying or breeding falsely represented hip conformation. The TPO is typically performed on dogs less than 10-12 months of age without radiographic signs of OA. Three osteotomies are made on the pubis, ischium, and ilium to allow reorientation of the acetabulum. Then an angled plate is placed on the ilium to secure the weight-bearing axis for bony healing. The forced manual ventroversion increases dorsal coverage of the femoral head and reduces the formation of OA by improving joint stability and congruence. Potential complications include a narrowed pelvic canal, sciatic neuropraxia, implant failure, and an abnormal gait. Lameness improves in 92% of dogs and the progression of OA appears to be slowed with this procedure. The JPS and TPO procedures have similar effects on hip conformation, although neither eliminates laxity or completely cures hip dysplasia but instead can arrest or limit the progression in mild to moderate cases. Both of these preventative surgeries require early puppy screening and counselling of owners about potential benefits and expected outcomes.

Antimicrobial resistance continued from page 1

inevitable in a world where antimicrobials are used to control bacterial diseases. Certain antimicrobial use practices increase the likelihood of the development of resistance¹:

1. Failure to administer at the correct dosage, route, or duration.
2. Administration at lower than therapeutic concentrations.
3. Inappropriate drug selection for the bacterial species, its drug susceptibility, or the condition being treated.
4. Administration for prolonged periods of time.
5. Administration to large proportions of the population

Antimicrobial resistance is important to both animal and public health. Resistant pathogens can cause economically-limiting animal diseases. Further, resistant zoonotic bacteria can have negative health and economic impacts for livestock producers due to altered public perception of the safety of a given commodity. Resistance can increase the burden of illness of both animal and human diseases by²:

1. Causing treatment failure when pathogens become resistant to drugs used for their therapy.
2. Increasing the severity and duration of illness attributable to the infection.
3. Resulting in infections that otherwise would not have occurred, called the "attributable fraction".
4. Contributing resistance traits (genetic determinants) to a broad bacterial population.

The direct effect of AMR on individual animal and herd health is understandable. It is more difficult to quantify the contribution of antimicrobial use in agriculture to AMR in zoonotic pathogens that can cause human disease due to the complex nature of the farm-to-fork continuum. Further, the population ecology of resistance determinants among pathogenic, commensal, and environmental bacteria is incredibly complex and the role of human and agricultural antimicrobial use in an ecological context is poorly understood. Bacterial responses to antimicrobial selection pressure are characterized as being diverse, promiscuous, rapid, persistent and novel.³ Genetic modification creates resistance determinants that can be the result of spontaneous mutations

in bacterial DNA or the acquisition and insertion of DNA harbouring AMR gene(s) from other bacteria or their immediate environment.⁴ Plasmid-mediated transfer can impart multiple resistance genes, conveying co-resistance to antimicrobials of various classes in one genetic event. The sharing of resistance genes between bacterial species results in the dissemination of these determinants between animal, human, and environmental populations.

Antimicrobial use, particularly at the group level for disease prevention, may be part of a farm's biosecurity protocol to prevent infectious disease caused by bacteria. There is increasing pressure on agriculture to limit the use of antimicrobials, in particular those used at the group level and at sub-therapeutic levels for growth promotion. Though there is evidence that agricultural use can contribute to AMR in zoonotic pathogens of public health concern, the relative contributions of agricultural versus human antimicrobial use remain largely unclear and are likely specific to the drug-bacterial species combination. To better understand these complex relationships, more research and risk assessments are required.

The Antimicrobial Stewardship in Agriculture and Veterinary Medicine Conference held in Toronto in November, 2011 strongly advocated a shift in thinking from the 'prudent use' of antimicrobials to 'antimicrobial stewardship'. This is not meant to diminish the positive work towards the creation of antimicrobial prudent use guidelines, such as those provided by the Canadian Veterinary Medical Association for multiple domestic animal species.⁵ These guidelines remain very useful tools for veterinarians and producers. However, there is concern that the term "prudent use" may imply a punitive approach about the need to reduce or eliminate antimicrobial use. In contrast, antimicrobial stewardship implies a more active role by society as a whole to maintain the usefulness of this precious resource. This can be achieved by adopting antimicrobial use practices that "optimize clinical outcomes while minimizing the unintended consequences; thereby minimising the selection and dissemination of AMR [determinants]" in both human and animal health.⁶

The loss of antimicrobial use could change how agriculture approaches biosecurity for livestock production. This threat increases the importance of sound prescription and medical record keeping for veterinarians to justify how and why antimicrobials are prescribed to their clients.⁷ The client, as

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the end user of antimicrobials, also bears the responsibility for prudent use and treatment records to demonstrate that they are using medications appropriately. At this time, AMR is not an international trade barrier for livestock and livestock products. However, as public attention to AMR and antimicrobial use practices escalates, there is increasing pressure for governments to evaluate the safety of agricultural antimicrobial use. The development of and adherence to prudent use guidelines and the adoption of a mindset towards stewardship will enhance the transparency of agricultural use of antimicrobials. Further research is required to develop sound science for risk assessments that will inform future policy decisions about antimicrobial use in agriculture.

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This article is based on Dr. Otto's presentation at the CanWest Veterinary Conference, hosted by the Alberta Veterinary Medical Association in Banff, AB from October 15-18, 2011.

CAAT continued from page 1

(MAWS), helping them accomplish their goals of curbing pet overpopulation and reducing the spread of disease by domestic dogs and cats around the Okavango Delta. This was the end of two weeks of some of the most challenging and rewarding veterinary work I've ever done, and I think I can speak for us all when I say, despite the weather, we were having the time of our lives.

CAAT was born in 2005 in response to the aftermath of Hurricane Katrina in New Orleans. When it became clear that veterinary medical aid was much needed and in short supply Donna Lasser, a Vancouver based animal health technician, coordinated a group of veterinarians, technicians, and assistants to head south to help out. The organization took off from there, but shifted its main focus away from emergency assistance and towards the provision of veterinary services in remote locations lacking access to these services. In Canada alone there are hundreds of communities without access to even the most basic veterinary care. Occasional visits by veterinarians from the closest major centre may be all these communities receive. Frequently, the result of this dearth of veterinary attention is overpopulation of local dog and cat populations and an increased incidence of preventable diseases such as rabies, parvovirus, and canine distemper. Free-roaming dogs in these communities also result in an increased incidence of dog bites. Inhumane population control methods are often practiced due to lack of education, and a sense of desperation.

I joined CAAT in the summer of 2008 after an associate returned raving about her experience at a weekend neuter clinic in Ucluelet, a community on the west coast of Vancouver Island. The group had been there the year before to provide spaying, neutering, and vaccination services on a First Nations reserve outside of town, and had been invited back for a repeat project – there's only so much that can be accomplished in one weekend. She went on about how challenging it was, and how much she enjoyed herself. I was vaguely familiar with CAAT, and had been thinking about joining some sort of humanitarian veterinary group for a while. After a little investigating, I thought it would be a good fit so I signed up.

I had been a member less than a year when I was asked to be a board member. A little more work, but I'd be able to be more actively involved in the group. One aspect of CAAT that I appreciated immediately was the emphasis on education in the communities they visit. In communities like Ucluelet, or Baker Lake, Nunavut, where the group has made return visits, the benefits of their efforts are evident; the incidence of dog bites has decreased and the local children seem to have an improved respect for dogs and cats as living beings. There is a reduction in the number of free roaming pets, and the incidence of some preventable diseases has decreased.

CAAT has also done extensive work outside of Canada. Projects have taken place in Peru, Belize, Fiji, Mexico, and as of last year Botswana, where we are establishing what we hope will be an ongoing relationship with MAWS, serving the Okavango Delta. The Okavango is a vast wetland in northern Botswana. Since it's a permanent water source, it attracts a vast array of wildlife species, traditional hunters, and more recently, tourists who flock to the numerous safari camps in the area to see elephants, lions, and hippos in their natural environment.



CAAT team at work in Botswana

The villages around the delta are home to an inestimable number of dogs and cats. Dogs are used for protection and herding and are allowed to roam freely in and around the villages, resulting in predation of smaller wildlife species. Similarly, cats help with vermin control. Their effect on smaller prey species diminishes the food supply for larger predators resulting in these animals making forays closer to established settlements (much like black bears visiting backyards in North Vancouver), and obvious safety concerns. Population control through spaying and neutering, combined with vaccination of all animals seen by MAWS and education to explain why this is so

important, is starting to have a significant impact in the area. The huge numbers of free roaming dogs and cats around the delta towns will keep MAWS, CAAT, and any number of other volunteers busy for many years to come.

Each CAAT project requires a certain number of veterinarians, technicians, and assistants who are selected from the general membership. A project announcement goes out to all members, and a team is selected from all applicants. Criteria for selection may depend on proximity to the community being served, especially for projects within Canada, and previous experience, both with CAAT and in the profession in general. Once selected, team members will convene in the project community. Transportation costs are often left up to the individual team member, and many have come up with very creative methods of fund raising – my dog cookie bake sale last year at my clinic raised several hundred dollars toward my Botswana airfare as well as a donation to CAAT itself.

I've taken part in three projects so far in my CAAT career, with a second Botswana project scheduled for mid-April (one of two Botswana projects planned for this year). The common denominator amongst these projects is the sense of camaraderie amongst participants that makes each one an adventure and each one, regardless of the destination, every bit as much fun as the last. Being thrown together with a group of strangers and required to work together in what can be, at times, very challenging circumstances is an amazing experience. Everyone is working towards a common goal, and egos are left at home. Watching how the community you're serving pulls together to help you only enhances the experience.

My last CAAT project took me to the town of Carmacks in the Yukon this past July. The community support we received was overwhelming, and the appreciation for our services was readily apparent. This was made evident by the mayor herself picking me up at 5am to drive me two hours south to Whitehorse to catch my 8am flight. And since I wasn't able to stay to enjoy that evening's bison roast she sent me off with a warm hug, 2 pounds of frozen moose, and an invitation to come back anytime.

If this kind of experience is at all appealing to you, I encourage you to join CAAT. We'll pull you out of your comfort zone and put you to a highly rewarding test. You won't regret it.

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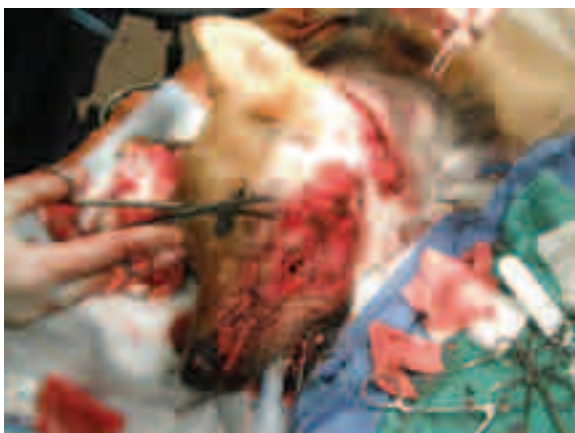
Buddy's story highlights need for stricter legislation

The staff at Walden Animal Hospital are busy planning the creation of a memorial so that no one forgets "Buddy" or his story. Buddy, a German Shepherd, had been brought in by a caring citizen who found him bleeding at the side of a rural road in St. Charles, Sudbury, Ontario in early March. Upon examination, the hospital determined Buddy had been shot in the face with a shotgun and began work immediately to stabilize him and focus on wound repair and pellet removal. Further investigation would determine that Buddy's owner had solicited the help of a friend to euthanize the dog instead of seeking veterinary help.

Buddy's recovery story spread through social media, and funds started coming into the clinic from all over North America, adding up to \$11,000. Sadly, while undergoing surgery to remove four teeth that were shattered by the gunshot, Buddy died unexpectedly of heart complications. Walden Animal Hospital has since set up a trust fund for the donations, dedicated to the medical care of abused and abandoned pets.

A 32-year-old man has been charged with four counts of animal cruelty, under the Ontario SPCA Act, in connection to the death of Buddy. The four charges include one count for causing the animal to be in distress, one count for permitting the animal to be in distress, one count for failing to provide adequate and appropriate medical attention, and one count for failing to humanely kill an animal and minimizes pain and distress to the animal. A person charged under the Ontario SPCA Act could face a maximum fine of \$60,000, up to two years in jail and a lifetime ban of owning any animals. According to Brad Dewar, Investigations and Communications Officer with the Ontario SPCA, "Animals are considered property under the criminal code and as such if someone were to make the decision to kill their animal, they would have to do it humanely."

Dr. Carolyn Lariviere, one of the attending veterinarians at Walden Animal Hospital who treated Buddy, said that Buddy's story has raised awareness regarding the current legislation concerning animal cruelty and inspired many people to get involved. It has also made veterinarians like her more aware of the divisiveness in the community over the humane treatment of animals, which highlights the need to take a stronger stance when it comes to legislation to protect animals. The conflict of opinions over a person's right to kill a pet was almost immediately apparent: "The immediate and overwhelming social media response on our website and Facebook page, both in support of the care the hospital provided and comments supporting an individual's right to euthanize a pet, were difficult to manage. Not only was every decision we made concerning Buddy's care in the spotlight, we also had to monitor and manage our Facebook page hourly to remove inappropriate comments to be in compliance with the



College of Veterinarians of Ontario guidelines." She likened some of the comments to a "witch hunt", and was thankful that their hospital had the resources and expertise to manage the public's reaction. With the growing popularity of social media, "online crisis management" is clearly an issue that needs to be addressed.

The Walden Animal Hospital is creating a memorial this spring as a special gift to Buddy. Dr. Lariviere says, "The memorial is a place to remember Buddy himself, and the generosity of spirit shown by the community towards a dog most only knew through photographs." The site will be a garden area featuring a Wishing Well focal point constructed by a local craftsman. "Buddy really inspired us, and we wanted his memorial to be a happy, hopeful place. The Wishing Well seemed like a perfect way to honour his memory." CV



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Lyme disease risk increasing with global warming

Ticks that carry Lyme disease are expanding their range and are likely to colonize the most densely populated areas of southern Canada in the next 10 years, according to a study recently published in the *Journal of Applied Ecology*. Researchers say that prompt action is necessary to prepare Canadians for a likely epidemic of Lyme disease, with an emphasis on surveillance activities to confirm the locations of emerging Lyme disease risk.

Changes in temperature are one of the most important factors that have contributed to the spreading of tick populations across Canada since 1990. As average temperatures continue to increase over the coming decades, the area where ticks live and reproduce will continue to reach further north. Lyme-transmitting ticks were virtually unknown in Canada in 1990, but today they may be found in areas where 18% of the country's population lives. This figure will rise to 82% in eastern Canada by 2020, according to the researchers' findings.

It is thought that ticks travel long distances during spring migration to settle in new areas by attaching themselves to migratory birds, and once they arrive, they colonize by feeding on deer and other mammals. Patrick A. Leighton, the lead researcher, and colleagues said "Anticipating how long it will take for ticks to become established in different regions is critical for targeting public health interventions to the right communities at the right times."

In order to track the movement, the researcher used both passive

surveillance data on ticks across Canada and model projections to determine survival rates.

Leighton explained, "Previous models have focused on temperature as a key determinant of habitat suitability, but this newer model suggests that temperature not only affects where ticks can establish, but also the speed of range expansion, with warmer areas being colonized more rapidly, which is consistent with field studies."

Ticks themselves do not cause Lyme disease, but can pass on the infection when they bite. Lyme disease is treated with

antibiotics and its symptoms include circular rashes and flu-like symptoms. Left untreated, it can have serious consequences. People can protect themselves by wearing appropriate clothing or applying DEET-based insect repellents.

Source: Leighton PA, et al. Predicting the speed of tick invasion: an empirical model of range expansion for the Lyme disease vector *Ixodes scapularis* in Canada. *Journal of Applied Ecology*, March 5, 2012. DOI: 10.1111/j.1365-2664.2012.02112.x CV

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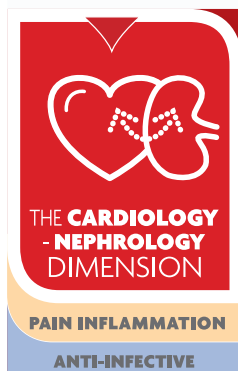
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Diagnosis and management of otitis externa

TORONTO, ON – Reviewing the signalment is the first step that must be taken when a dog is presented with clinical signs of ear disease. The differential diagnosis for puppies should include otodectes, dermatophytosis, and juvenile cellulitis, while a young adult dog would typically be suspected of environmental allergen induced atopic dermatitis and cutaneous adverse food reactions, explained Paul B. Bloom, DVM, speaking at the Ontario Veterinary Medical Association Conference. A geriatric dog without prior ear disease should be examined for neoplasia or an endocrinopathy.

Obtaining a detailed history is the next step, starting with a copy of the dog's medical record. It is important to find out when the symptoms first occurred; whether the dog has ever displayed excessive licking, scratching, chewing, biting or rubbing; whether the dog ever had ear problems before this episode, and if so when, how it was treated and the response. It is also important to determine whether the dog lives indoors, outdoors or both; if there are any other pets in the household and if so, what kind and whether they are symptomatic, and finally, whether any of the humans in the household are showing "new" skin problems.

After reviewing signalment and thoroughly questioning the owner, the next step is to do a complete physical examination, checking for any constitutional signs that may be present. A complete dermatologic examination should follow, including an otic examination.

An ear exam should follow, noting any alopecia, erythema, ulceration, crusting, scaling, or swelling. The canals should be palpated for pain, calcification, or thickening, followed by an otoscopic examination of the ear canals. The presence, degree, and location of inflammation, ulceration, and proliferative changes should be noted. The size of both the vertical and horizontal canals along with the type, location, and quantity of debris or exudate should also be included in the medical record. If the tympanic membrane cannot be seen, it will need to be determined whether it is due to swelling, the presence of a ceruminolith, or debris in the proximal horizontal canal.

It is important to evaluate for concurrent middle or inner ear disease because dogs with chronic recurrent otitis externa may have concurrent otitis media. This step may require heavy sedation or general anesthesia. Evidence of middle ear involvement includes a ruptured or abnormal appearing tympanic membrane. Dr. Bloom noted that even though an intact tympanic membrane does not rule out otitis media, the tympanic membrane is not usually normal in appearance.

He also said that while some veterinarians collect ear cytology samples prior to the examination, he feels that this makes it difficult to evaluate the true appearance of the ear canal due to debris being pushed into the horizontal canal, limiting inspection of the tympanic membrane.

Diagnosis and treatment

The first step is to identify and treat the primary cause(s) of the ear disease. These would include parasites; foreign bodies; hypersensitivities; allergic or irritant contact dermatitis; endocrinopathies, autoimmune or immune mediated diseases; zinc responsive dermatosis; immunosuppressive diseases; neoplasias; and dermatophytosis. In addition to identifying the primary cause, secondary factors must be addressed if possible, which can include anatomic factors, excessive moisture in ears, and iatrogenic trauma.

Lastly, perpetuating factors must be identified and treated, and these may include bacteria; fungi; progressive pathological changes; otitis media; contact hypersensitivity/irritant; and treatment errors.

Laboratory tests are a necessary component to the proper workup of a case of canine ear disease, and may include CBC, serum chemistry profile, urinalysis, skin scrapings, fungal culture, endocrine testing, and skin biopsies, depending on the differential diagnoses. Dr. Bloom said that he only performs cytology if the ears are inflamed or have exudate, and *any* organism seen will be treated as part of the therapy regardless of the number present. He said that the only time he does perform cytology during therapy is when the ear is not improving clinically *or* if there were rods present on the initial cytology. If there is a mixed population of organisms present at

the initial examination without rods, and the ear is clinically normal at the re-check examination, follow-up cytology is not performed *but therapy is continued for an additional 14 days*.

Dr. Bloom also said that he only cultures cases of otitis externa when there are proliferative changes present *and* there are numerous rods present on cytology *and* the dog has failed to respond to his empirical antimicrobial therapy, saying that studies have demonstrated a lack of benefit in performing cultures.

The MIC (broth microdilution technique) method is the "gold standard" for culture technique. The advantage is that not only does it indicate susceptibility, but it also implies the relative risk of emerging resistance and thus the need for a high dose.

The treatment is directed toward the primary cause(s) and perpetuating factors. Ear cleaning is performed in the clinic with a bulb syringe, AuriFlush™ system, or by retrograde tube flushing, under anesthesia. If the ears are very swollen, it is preferable to use topical glucocorticoids, with or without systemic glucocorticoids, for 10-14 days to decrease the swelling.

Dr. Bloom said that he prefers using ointments over drops because he believes that ointments deliver the drugs to the region of the tympanic membrane better than drops do, and also because the base in the otic ointments act as a ceruminolytic agent.

Most topical agents contain a combination of glucocorticoids, antibacterial, and antifungal agents. Antifungal agents used include thiabendazole (poor efficacy against *Malassezia*), nystatin (mixed efficacy against *Malassezia*), clotrimazole 1%, miconazole 1 or 2%, and ketoconazole 2% and posaconazole. When gram-negative organisms are present in cases of otitis externa, ethylenediaminetetraacetic acid (EDTA) should be used *as part of the therapy*. Topical EDTA solution has a direct bactericidal action by chelating metal ions important for the integrity of the bacterial cell wall. EDTA also stimulates the release of outer cell membrane lipopolysaccharides, proteins, and other cell contents. The end result of these actions is the leakage of cell solutes leading to bactericide and better drug penetration and antimicrobial activity.

Successful treatment of otitis externa frequently requires topical glucocorticoids, and it is best to begin with the most potent form and then reduce potency. Dr. Bloom said that it is important to remember that topical steroids are systemically absorbed and can lower thyroid hormone concentrations, elevate liver enzymes, and even cause polyuria/polydypsia.

Systemic antibiotics or antifungal agents are used only if there is evidence of otitis media with bacteria (other than *Pseudomonas*) or *Malassezia* present on cytology, or in patients that test positive for bacteria or *Malassezia* on cytology, and that have severe proliferative changes in the ear canals that failed to respond to topical treatment. Empirical choices for cocci include cephalosporins, amoxicillin-clavulanic acid, clindamycin, and potentiated sulfas. Empirical choices for rods include cephalosporins, amoxicillin-clavulanic acid, and potentiated sulfas.

If the otitis media infection is due to *Pseudomonas* it is unlikely that systemic antibiotics will be useful. This is because systemic administration of antibiotics, including the fluoroquinolones, cannot exceed the MIC for *P. aeruginosa*. Since *P. aeruginosa* is the most common pathogen associated with otitis media in dogs, systemic administration of antibiotics will only encourage more resistant organisms. Dr. Bloom said that in his practice, topical treatment is the mainstay therapy in cases of otitis media.

Systemic glucocorticoids are used if the ear canals are edematous and/or stenotic. Even proliferative changes may decrease due to the secondary edema that may be present. Prednisone should be used and then the patient reassessed to determine whether the dose should be maintained for another 7-14 days, decreased, or stopped.

Dr. Bloom concluded by saying that it is important to understand that ear disease is a non-specific symptom, and therefore it is appropriate to approach the diagnosis as you would any other skin disease. CV

Treatment of clinical mastitis: strategies to improve economics of therapy

HALIFAX, NS – Mastitis is the most costly infectious disease on dairy farms and is the most frequent cause of antibiotic use, explained Greg Keefe, DVM, speaking at the Canadian Veterinary Medical Association Conference. The cost is largely attributed to the necessity of withholding milk due to residue concerns. In Canada over one half of antibiotic use in the dairy industry is to treat or prevent mastitis. There is public concern that the use of antibiotics in agriculture may lead to antimicrobial resistance in humans. Dr. Keefe said that veterinarians have to be judicious in their use of antibiotics, but questioned whether it is humane to withhold treatment if it is beneficial to the animal. He said that judicious use may not mean reduced use in all cases. In fact, some circumstances may benefit from increased use, while others require less or no antibiotic use at all.

Treatment decisions

Clinical mastitis is inflammation in the udder in response to infection from a wide range of bacteria. Dr. Keefe said that when designing a treatment regime, it is important to know what the causative organism is in order to choose an antimicrobial with an appropriate spectrum of activity. A recent Canadian study reported that about 40% of milk samples submitted from cows with clinical mastitis yielded no bacterial growth. Additionally, early studies found no difference in clinical or bacteriological cure rates in mastitis cases treated with antibiotics versus those treated with oxytocin. However recurrence rates were higher for cases caused by certain organisms, if they were untreated. It has been estimated that antibiotics may not be justified in 50-80% of clinical mastitis cases.

He stressed that antimicrobial therapy should only be used for pathogen groups where there is strong evidence of benefit, saying that by treating fewer cases with antibiotics and discarding less milk that contains residue, the

cost per case of mastitis can be reduced. One method to target therapy is to use an on-farm culture system. Over the last five years, the following two groups in North America have been working on large clinical trials to evaluate the short and long-term implications of on-farm culture driven selective clinical mastitis therapy.

Canadian study

The Canadian Bovine Mastitis Research Network (CBMRN) study was lead by Dr. Keefe and two of

his graduate students, Dr. Jennifer McCarron and Dr. Kimberley MacDonald. It began by directly comparing tools that might be adapted for on-farm use in the Canadian industry: Petrifilm and University of Minnesota Biplates. Based on the relative equivalencies of the systems to predict infection status and their stability properties, the Canadian study proceeded to the on-farm clinical trial with the Petrifilm system.

Fifty-four Canadian dairy farms from seven provinces were enrolled in a clinical trial to evaluate the utility

Clinical mastitis continues on page 16

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For Pet's Sake

Nutraceuticals in veterinary behaviour: show me the evidence

The word nutraceutical, as defined by Webster's dictionary, originates from the words "nutrition" and "pharmaceutical"; it is a food or food product that reportedly provides health and medical benefits, including the prevention and treatment of disease. Health Canada defines the term as "a product isolated or purified from foods that is generally sold in medicinal forms not usually associated with food". Nutraceuticals are becoming increasingly popular as many clients are attracted to the appeal of natural products. Yet, just because a product is natural does not mean that it is safe or free from side effects and contraindications. It is also essential that veterinarians evaluate the evidence of efficacy before recommending or dispensing any natural therapeutic. Since the placebo effect can be as high as 50% in behavioural studies, a randomized placebo control trial would be the gold standard. In addition, once a product has demonstrated efficacy, the practitioner should dispense the "branded" and tested product, since standardization and quality of ingredients can vary between products.

One of the most common behavioural issues a veterinarian or veterinary behaviourist deals with is anxiety. Anxiety and stress can also have effects on physical health including gastrointestinal signs, dermatological issues, urinary tract disorders, immunosuppression, and even a shorter life span. Thus, anxiety affects both the health and welfare of the pet, and contributes to a weakened pet-owner bond. When the bond is broken, the client's commitment to health care is affected, and euthanasia is not uncommon.

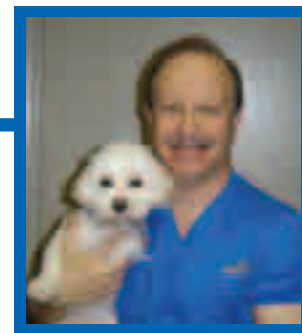
Treatment of anxiety should begin with identifying and avoiding stimuli and situations that incite anxiety, along with behaviour modification and medication to reduce anxiety. Natural products may offer a more immediate effect than drugs such as fluoxetine, which can take 4 to 8 weeks to achieve optimal therapeutic effect. In addition, some nutraceuticals may have fewer side effects and a wider margin of safety.

In Canada, there are several natural products marketed for veterinary use for the treatment of stress and/or anxiety in pets. However, of the hundreds of natural products marketed to treat anxiety, very few have been evaluated in controlled studies. Evidence-based studies have been published for L-theanine (Anxitane), alpha-casozepine (Zylkène), pheromones (Adaptil and Feliway), L-Tryptophan (in combination with a reduced protein diet), melatonin, aromatherapy (e.g. lavender), and a diet containing tryptophan and alpha-casozepine (Calm).

Alpha casozepine (Zylkène, Vétoquinol Canada) is derived from casein, the protein in milk. It may potentiate the effects of gaba amino butyric acid (GABA), an inhibitory neurotransmitter. In one study (Beata et. al, in 2007), the authors concluded that alpha-casozepine was equally as effective as selegiline (used and marketed in Europe to treat anxiety) for the treatment of anxiety disorders in dogs. A second study in cats demonstrated efficacy over the placebo in reducing anxiety disorders. L-theanine (Anxitane, Virbac Animal Health) is made of 99.9% pure L-theanine. It may increase GABA and block glutamate (an excitatory neurotransmitter). In a controlled laboratory study, L-theanine was significantly more effective than the placebo in reducing fear of unknown humans. Pheromones (Adaptil and Feliway, Merck Animal Health Canada) have many potential applications for reducing anxiety; they have demonstrated efficacy in reducing urine marking in cats, reducing stress in hospitalized pets, improving socialization, reducing anxiety when dogs are first adopted into the home, and reducing separation anxiety. Aromatherapy (lavender) was demonstrated to reduce travel anxiety, and smaller studies or case reviews have reported a reduction in anxiety with melatonin and a reduction in aggression when feeding a diet with low protein and a tryptophan supplement. Most recently a reduction in anxiety-related behaviour was demonstrated with a diet of alpha-casozepine and L-tryptophan (Calm, Royal Canin).

Although further studies are needed, evidence is now emerging that some natural therapeutics may have clinical efficacy in reducing anxiety either alone, or in combination with licensed medications such as fluoxetine or clomipramine. On the other hand, very few products have been adequately assessed; therefore, before recommending or dispensing any natural products, the practitioner should follow the mantra "show me the evidence".

This article was co-authored by Dr. Colleen Wilson (osgoodvet.com) and Dr. Gary Landsberg (northtorontovets.com). It was first published in the OVMA's Focus magazine and is reprinted with permission.



G.M. Landsberg
BSc, DVM, DACVB,
dip ECVBM-CA

Clinical mastitis continued from page 13

of an on-farm culture system and selective intramammary therapy on clinical mastitis cases. Cows with abnormal milk only or inflamed udders and abnormal milk were randomly allocated to either an on-farm culture group or an antibiotic treated control group. Cows exhibiting systemic signs of illness were not included in this study. Cases with significant Gram-positive growth and cases with no significant bacterial growth or mild coliform infections were classified as treatment and no treatment cases, respectively.

All cows contributing cases were followed up for a minimum of 4 months to assess relapse of clinical signs. Clinical cure was assessed based on milk returning to normal appearance as recorded by the producer. Cases where the milk failed to return to normal or required additional antibiotic treatments beyond the constraints of the assigned treatment protocol were recorded as failures. Bacteriological cure rates were determined by clearance of the causative organism 14-21 and 28-35 days post event.

In total 997 clinical cases were enrolled of which 621 from 48 farms met

all criteria and had complete records available. From the samples, 55% were Gram-positive, 11% were Coliforms, and 24% had no significant growth on standard microbiology in CBMRN laboratories. Using the on-farm system, 60% of samples were identified as Gram-positive, leading to a reduction in antibiotic treatment in all cases by 40%. The probability of needing a secondary therapy was the same between the control group and the culture group.

Cases were deemed to not have cured if additional antibiotics were used, the cow became systemically ill, the cow was dried off or culled due to the case, or the milk did not return to normal. There was no difference in the overall clinical cure rate or overall days to clinical cure.

There was a net economic benefit for the producer, which was highest in herds with accurate diagnosis and increased with the proportion of infections that were caused by coliform infections or those with no pathogens identified. An average savings of \$23 per clinical case was calculated in accurately diagnosed cases. Average savings of over \$120 per case was calculated in

accurately diagnosed coliform and no-growth cases.

Great Lakes study

This study was led by Dr. Sandra Godden in Minnesota, with collaboration from Dr. Pam Ruegg in Wisconsin and Dr. Ken Leslie in Ontario. In this study, of the 449 cows enrolled, 44% in the culture group were treated with Cephapirin (Gram-positive or mixed), whereas 66% were either Gram-negative or had no bacterial growth.

For short-term outcomes, there was a tendency for a reduction in the number of days out of the tank for cows assigned to the culture-based group (5.2 vs. 5.9 days). There was no difference in days to clinical cure or the bacteriologic cure rate for the two groups. Similarly there were no differences between the selectively treated group and the blanket-treated group for presence of infection, clinical mastitis recurrence, and risk of removal after mastitis.

For longer-term outcomes there were no significant differences between the cows treated selectively using the on-farm culture system and the blanket-treated cows for days to subsequent mastitis event and risk of and days to culling.

Dr. Keefe said that the development of farm treatment protocols should be done at the herd level in consultation with the herd veterinarian. Herds that have higher no-growth or coliform mastitis rates will have more economic advantage by using on-farm culture versus herds with high Gram-positive infection rates. The treatment protocols in each of these studies dictated no antibiotic therapy for cows with no significant bacterial growth or mild coliform cases. Monitoring for the emergence of chronic strains should be done at the farm level. If chronic strains emerge, a farm treatment protocol that includes targeted treatment of Gram-negative infections with appropriate products should be considered.

Conclusions

Dr. Keefe concluded by saying that for clinical mastitis therapy decisions, antibiotic use can be decreased using the systems described without a negative

effect in bacteriologic or clinical cure. The economics of using on-farm systems for clinical mastitis therapy depends on accuracy of diagnosis and the rate of no-growth and coliform infections on the farm. Herds with lower levels of Gram-positive infections will benefit most because of lower antibiotic and milk withholding costs.

Regardless of the system used, it is important to routinely submit samples to a diagnostic laboratory for quality control and to fully identify the mastitis pathogens for developing control programs. Future research in this area should focus on developing and testing new technologies that will provide accurate feedback to producers in a more timely fashion and ultimately improve the economics of on-farm diagnosis. CV

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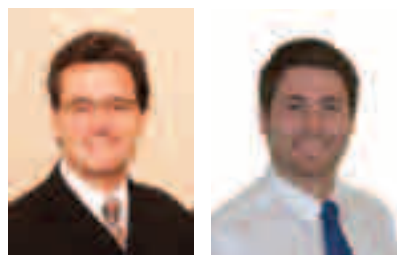
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The private sale: are you thinking of selling your practice privately?



By Timothy Brown and Jon Walton

Occasionally, after having completed an appraisal, clients tell us that they are going to sell their veterinary practice to an associate, or to another colleague. While a broker would prefer to act as an agent, thereby earning the usual commission,

we do not insist that our appraisal clients also use our brokerage services. This is known as ‘tied selling’ and our industry regulator frowns upon it.

What are the benefits of the ‘private’ or ‘Limited Market Exposure’ (LME) sale? Are there any pitfalls?

The first perceived benefit, held by the seller, is that he/she will save the usual commission paid to the broker. Sellers then conclude that this will increase the net proceeds of the sale. While this is possible, informal research reveals it may NOT be the case.

The primary reason the net proceeds of a private sale are not as high as anticipated, when compared with a brokered sale, is that buyers quickly suggest that the lack of a commission should entitle them to a reduced sale price.

We asked several leading and reputable bankers, accountants, and lawyers, who are active in the veterinary market, what their clients were actually saving when a private sale occurs. The answer may surprise you — most of these market experts readily admit that the sale price was notably lower, when compared with similar ‘brokered sales’ and that the client’s anticipated savings rarely materialized.

Another concern for the private seller is the accidental withholding of valuable information. Buyers are afraid to insult the owner by asking some of the more difficult questions about financial matters or clinical philosophy, but rarely have this reservation when working with brokers. We have often heard a buyer say, “I wish I had known that before buying this practice” and we reply with, “Why didn’t you ask?”

Invariably, the answer is “I did not want to insult him/her.”

Similarly, sellers who have sold their practice privately, tell us they wish they had known more about the buyer before the sale was completed, and often remark, “I didn’t want to discourage him/her, so I never mentioned some of the aspects of my practice.”

For the buyer, the obvious benefit is that he/she does not have to compete with other buyers in the marketplace. This affords the buyer more time to investigate and reduces the pressure to increase the offer. One major shortcoming for the buyer is that not all the relevant facts about a practice may be revealed before proceeding, due to the desire to safeguard professional relations. Difficult questions must be asked when buying a practice.

Professional relations are important to veterinarians, since they genuinely want to trust each other, and in the large majority of sales trust is earned. However, in today’s ever-changing market, generational, gender and ethnic variables are now playing a large role in the buyer/seller interaction process.

We believe that veterinarians who try to buy a practice privately will undoubtedly offer a lower sale price in the absence of a broker. Further, if a buyer knows that he/she may be the only ‘option’ being explored by the seller, they may secretly feel a distinct advantage — perhaps at the seller’s expense.

Buyers have remarked they think private sellers are either cheap or naive. Is that how you want to be perceived by the buyer of your practice?

Timothy A. Brown is the CEO of ROI Corporation, a company that specializes in professional practice appraisals, brokerage, consulting, locum placements, associateships and practice financing across Canada.

Jon J. Walton is a national associate at ROI Corporation and head of the veterinary division. Jon also sits on the board of directors for the Hamilton Veterinary Academy.

For further information visit www.roicorp.com.

Clinical pain management strategies

TORONTO, ON – Newly available analgesics and novel methods for the use of standard medications have greatly expanded options for safe and effective relief of pain in veterinary patients. Analgesic therapy should be considered an integral part of our care when there is a reasonable possibility that pain might result from a medical procedure or condition, explained Ralph Harvey, DVM, MS, Diplomate ACVA, presenting at the Ontario Veterinary Medical Association Conference. Recognizing pain in animals requires consideration of overt signs and subtle behavioural changes. As in people, individual analgesic requirements and responses vary with the animal and the peculiarities of each situation through recovery from surgery or critical illness. Therefore, he stressed, it is always important to “dose to effect.”

Rating pain

Options for evaluation include a simple descriptive scale, numerical rating scale, composite scale, and interactive visual analog scale. Dr. Harvey said that the numerical rating scale is generally the preferred tool for evaluating

clinical pain. This tool measures pain on scale of 1-10, where “0” is no pain and “10” is the worst possible pain for that condition. The scoring is based on behavioural signs and is conducted and repeated by the owners, veterinarians, and staff before and after analgesic interventions.

Potential indicators of pain

Dog	Cat
Hunched or prayer position	Poor/lack of grooming
Glazed facial expression	Hissing or aggression if the painful part is manipulated
Attention-seeking and whining	Tendency to hide the painful part and look normal
Licking the painful area	Dissociation from the environment
Not hiding the painful body part	Vocalization is rare

Species-specific responses to chronic pain

Dogs: eating behaviour is rarely affected

Cats: isolation from others in the household, decreased grooming, and cessation of eating

Horses: inappetance, severe weight loss, dull expression, glazed eyes, and basewide stance

Ruminants: weight loss and isolation from the herd

Pigs: reluctance to rise, reduced social interaction, and little appetite change

Types of pain management

The best results are obtained when the analgesics are given *pre-emptively*. Early and frequent use of analgesics result in a lower total dose than do late and infrequent application as pain becomes a greater and greater challenge

Numerical rating scale

- Scale of 0-10
 - “0” as no pain
 - “10” as the worst possible pain for that condition
- Based on behavioural signs
- Interactive
 - Approach, engage, physically contact, elicit responses
- Repeated evaluations by owners, veterinarians, and staff
- Evaluations before and after analgesic interventions
- Individualize interactions and evaluations to patient needs
- Pain score recorded for every patient evaluation



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for the patient. Untreated and inadequately treated pain leads to maladaptive chronic pain conditions that can far outlast actual tissue trauma.

Multi-modal analgesia

Multi-modal analgesia, or the combination of pain-management methods, works much in the same way in that anesthetic agents are used in various combinations for the best patient care. New routes and methods of drug administration are being developed and validated. These include patient-controlled analgesia (PCA) for humans, trans-dermal opioids (patches), controlled release gels, and neuroaxial (epidural and spinal) analgesics. For “balanced analgesia” this may be represented as using an opioid as a pre-anesthetic and post-operative analgesic along with a local anesthetic block. Alternatively, a pre-operative opioid, a local anesthetic infusion both during and after surgery, and an NSAID post-operatively can be used. Dr. Harvey said that multi-modal or balanced analgesia has been shown to greatly improve analgesia with fewer side effects than might result from a more massive dose of any single analgesic medication.

Opioids

Opioids can be used as pre-anesthetic medication, and for analgesia and sedation. They are the sole drug for some humans, and a valuable adjuvant for veterinary patients for the induction of anesthesia. Opioids also reduce anesthetic requirement, decrease complications, and improve outcome during surgery. They offer improved outcome and a quicker recovery post-operatively.

Non-steroidal anti-inflammatory drugs (NSAIDs)

For patients on NSAIDs, perioperative risks of renal damage may be reduced by the appropriate administration of IV fluids before, during, and after anesthesia to maintain blood pressure and renal blood flow. GI irritation may be subject to great individual variation. Patients should be monitored for development of intolerance and side effects as well as for changes in

efficacy. Some of the leading NSAIDs for use in animals are listed below.

Carprofen (Rimadyl) has long been a popular choice for dogs. This was one of our first lower toxicity NSAID’s for dogs to provide relief of pain and inflammation due to canine arthritis, orthopedic and soft tissue surgery. It is available as oral caplets, chewable tablets, and injectable solution.

Deracoxib (Deramaxx) is available as flavored tablets with “Cox-2 specific” action for dogs. Use as single daily dose for osteoarthritis, or at a higher dose rate (not to exceed 7 days) for post-operative inflammation and pain. Can be given to fasting dogs, but give with food to improve bio-availability.

Meloxicam (Metacam) for dogs and cats has extensive clinical experience in Canada and EU, including the injectable and oral formulations. Oral liquid formulation has great palatability, increasing compliance, and allowing for more accurate dosing. The rule is to work down to lowest effective dose and to use the lower concentration formulation for smaller patients. Chronic low-dose use is controversial but recommended by many experts.

Firocoxib (Previcox) is available as chewable tablets for dogs, once daily, with or without food. It provides selective inhibition of cyclooxygenase-2 (COX-2) for management of osteoarthritis. Use lowest effective dose.

Robenacoxib (Onsior) Our newest available coxib-class NSAID for use in cats as well as dogs may offer a high safety index as a function of both its high COX-2 selectivity and rapid clearance. Flavoured tablets are for musculoskeletal pain (including small flavoured tablets for use in cats for up to six days) and injectable formulations (single dose) for surgical analgesia.

Other NSAIDs

The toxic side effects can be prominent and many reports warn of G.I. toxicity, therefore G.I. protective agents (e.g. misoprostol) can be beneficial. There is also considerable patient-to-patient variation in susceptibility to toxic effects. Anti-inflammatory and analgesic effects are also quite individual, as they are in human patients. Dr. Harvey stressed that acetaminophen is very toxic for cats.

Epidural analgesia and anesthesia

Spinal or epidural opioid analgesia has been well described and proven effective in veterinary medicine. Epidural morphine analgesia is widely used in referral and academic centres and is increasingly popular as a method for providing long-lasting profound analgesia. The technique is rather simple, easily accomplished with basic clinical skill, and can be very cost-effective for providing substantial analgesia.

Fentanyl patches for sustained analgesia

Trans-dermal uptake of sustained-release fentanyl from a patch applied to the skin can provide long-term analgesia. This technology has been adapted from the management of cancer pain in human patients to veterinary care where it can be useful for sustained analgesia in animals with significant trauma (e.g. multiple fractures after vehicular trauma), as a portion of the management of post-operative pain, and in some cancer patients. Fentanyl patches can be useful in cats as well as dogs. Precautions and strict limitations are essential considerations with these products.

Fentanyl can be a highly abused opioid and there have been reports of clients diverting fentanyl patches from their animals for drug abuse purposes. Some clinicians find the fentanyl patches a very useful part of managing cancer pain in outpatients, including the terminally ill. It is important to emphasize the potential dangers and the importance of protecting other pets and children from ingestion or other possible exposures. Since used patches still contain fentanyl, they should be handled with care. Duragesic Patches are approved for use in human patients only, and all veterinary use is strictly off-label.

Summary

Recognizing pain in animals involves observation of signs and subtle behavioural changes. Pain rating scales can be a useful tool for evaluating pain. The type of pain management selected should be individualized for each patient and preferably given pre-emptively for best results. A multi-modal approach, or the use of “balanced analgesia”, is generally more effective and safer than a higher dose single treatment approach. Finally, Dr. Harvey stressed the importance of dosing to effect, as each analgesic requirement and response varies with the animal and the individual situation. CV



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Retaining employees: what's in your toolbox?

NEW ORLEANS, LA – Getting rid of the “bad apples” and focusing on what you can do to retain and develop more valued employees is a first step in building a successful practice, explained Andreas P. Pahl, MBA, CVPM, and Bashore Halow, CVPM, LVT, speaking at the Veterinary Hospital Managers Association Management Exchange “Insight Through Interaction”. Finding a way to satisfy employees’ career needs while getting the very best work from them every day should be the goal of every practice, and this can be achieved by employing the tools in the “retention toolbox”. Using tangible tools, such as competitive wages, health and dental insurance, continuing education, and retirement plans, as well as intangible tools, like job satisfaction, work-life balance, job enrichment, and a positive hospital culture, can make the difference between business success and failure.

At the Pine Ridge Animal Hospital, Deborah, a client care representative who is a favourite of the owner Dr. Aimwell, is not well liked by the rest of the staff. She has been working with the practice for six months and has made excellent progress, but seems indifferent to her coworkers’ dislike and prefers to complete tasks on her own. Jimmy John, the practice manager, finds Deborah difficult to work with. The two just don’t see eye to eye. Dr. Aimwell, who has difficulty managing and supporting his staff, is unable to deal with the situation. After months of growing frustration, Deborah hands in her resignation. While Jimmy John has demonstrated longevity, loyalty, and a desire to succeed, Deborah has brought much needed skills to the practice. Can the conflicts be overcome, and is Deborah worth saving? While Jimmy John is lacking in emotional intelligence, he has proven his commitment to the hospital. Is this enough?

Costs of keeping and losing employees

Retaining bad employees and losing the great ones involves significant costs. Keeping less productive or “trouble” workers sends a message to the team that performance is not an important criteria for employment, and as a result growth is jeopardized. It also reflects badly on the employer; as Mr. Halow noted, “an employer who tolerates bad behaviour undermines their own credibility and diminishes the respect they are ultimately able to garner from their team members. The less an employee looks up to or respects their employer, the less likely they are to perform well and remain at the job.” Losing a great employee, he added, can affect the practice’s sales, be demoralizing for both the clients and the team members, and basically put the status quo of the business at risk.

According to a U.S. Careerbuilder Survey of 2,696 employees, negative hiring or retention decisions can result in a 41% loss of business productivity, 40% loss of work time to recruit and train another worker, and a 37% increase in cost to recruit and train another worker. As well, employee morale is negatively affected. It is estimated that the turnover cost for an employee making \$8/hour is anywhere between \$3,500 and \$25,000, the average being

Forbes 7 reasons why companies fail to keep their best talent

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about \$9,444. But as Mr. Pahl explained, turnover costs are misleading; the value of keeping one frontline employee is much greater than the cost of losing one, because turning someone into a 20-year employee can save many thousands of dollars in the long run.

What do employees want?

Surveying team members regarding their current benefits is a straightforward approach. In addition to monetary benefits, like paid vacation and health insurance, include non-monetary rewards, such as praise for a job well done. Find out what you can offer to make the job more appealing and rewarding. At the same time, employers must ask tough questions about their employees: is the person moving the practice towards the mission, are they capable of realizing all the elements of their job description to help grow the practice, and are they a positive presence in the work environment? Both Pahl and Halow stress that growing and maintaining a successful practice involves understanding and embracing the team approach, and providing generous amounts of recognition and respect along the way.

Tools for retaining employees

Mr. Halow said that employers with the best retention rates don't necessarily offer the best insurance rates, or the best healthcare plans. Good retention is more a result of working for a well-respected leader who is able to provide workers with the incentives that matter the most to them. This can be done in part by providing a culture where the employer has a high level of interaction with their team as well as having an environment in which employees can mould the culture. Every practice should have an internal mission statement that truly encapsulates the goals – it can be lofty but should be realistic. Marketing services and growing the business should be part of it. As well, every employee should have a job description that *qualitatively* outlines what they should be

doing or some process by which the employee is not only trained what to do, but *how* to do it. For example, it's not enough that employees answer the phone; we want that task done in a certain way. Without a system in place to discuss or train quality, a line-item job description falls short. Additionally a job description should include personal qualities such as integrity and salesmanship. Finally, employees should be reviewed regularly, not so much for the inevitable wage increase, but as an honest acknowledgement that we are paying attention to the details of their performance, that their efforts matter, and that we care."

Nothing can undermine a good workplace as quickly as a toxic employee. Mr. Pahl stressed the importance of carefully vetting new hires and weeding out the "bad apples" as quickly as possible. This includes the hiring and firing of doctors. He said that in many cases the staff will avoid sharing their feelings with their boss, especially about a superior, so it's up to the employer to be aware of potentially toxic undercurrents. This can be most easily accomplished by taking the time to know the staff, and to find out what's important to them in terms of job satisfaction. Mr. Pahl likened employee retention to a bonsai tree, saying that pruning is a never-ending process. "Every time you bring in someone new you want to bring the average up – you always want to improve your group, whether it's a bubbly, friendly receptionist or a new vet technician with exceptional technical skills. It's never worth settling for second best."

In some cases, however, retaining great people may be unrealistic. Mr. Halow acknowledged that the great high school student who shows up on time and is devoted to the job will likely leave one day to pursue other things. "Great people move on to do other great things. But remember, providing a great person an opportunity to truly shine has a magnetic draw that's difficult to shake. Who knows, that hard-working student may return a few years later to apply as your next vet!" CV

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Best Practices

Neuroscience insights to increase performance

Neuroscience is the study of the nervous system and its relationship to behaviour and learning. Neuroscience is being used to manage talent in today's business environments. Below is a summary of some pertinent information and facts about neuroscience and its effects on performance.

- Goals are necessary to motivate us to perform. Realistic attainable goals stimulate the release of neurochemicals (dopamine), which motivate us to achieve the goals. In addition, goal setting triggers the brain to selectively filter and use important information to assist us with goal attainment.
- A calm state of mind leads to insightful ideas. Alpha brainwaves result in a calm brain state. This calm brain state is required before a burst of gamma brainwaves can occur. A burst of gamma brainwaves occurs when we develop a "bright idea".
- Sleep deprivation affects performance in many ways including the ability to remember, learn, pay attention, and make decisions. Older adults perform better than younger adults when sleep deprived. Sleep deprived younger adults are more likely to inaccurately overstate their abilities. Women have more sleep problems than men; however, women generally perform better when sleep deprived than men with the following exception: women are less likely to be able to accurately interpret the emotions of others when they are sleep deprived. For example, they are less able to accurately interpret a smile or a frown on someone's face when sleep deprived, potentially leading to an inappropriate response.
- Thirty minutes of aerobic exercise improves "executive" functions in the brain, which include the ability to pay attention, plan, organize, and make decisions.
- Multi-tasking is often considered highly desirable and productive behaviour; however, adding a task reduces the performance in ALL the tasks. Multi-tasking can also impair memory retention and learning.
- There is a relatively inexpensive way to reduce stress, improve attention, and to increase performance in the workplace – mindfulness meditation. Google, Microsoft, Proctor and Gamble, Comcast, and many more successful companies have incorporated mindfulness training into their organization. Mindfulness training has its roots in Buddhist meditation. It deals with focusing one's attention on the present moment. Research studies on mindfulness training have demonstrated that mindfulness training can significantly

improve an individual's emotional wellbeing. Training to live in the present moment reduces stress and improves immune function. It increases an individual's ability to pay attention and it has led to enhanced academic performance, particularly among women.

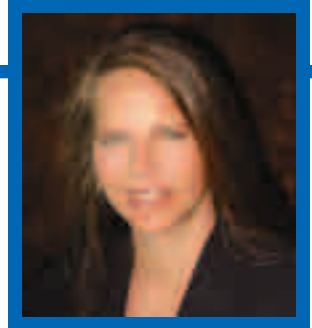
- Leaders in the workplace have the choice of motivating employee behaviour and performance with rewards or threats. Our brains respond differently when we are exposed to threatening situations versus rewarding situations. The neurochemical dopamine is released in a rewarding environment contributing to increased performance while our brain releases cortisol in a threatening environment which can contribute to decreased performance. A positive supportive work environment can improve employee effectiveness and performance.
- A study on the results of performance reviews revealed that only 30% of employees had improved performance after receiving feedback from their performance review. In contrast, 40% of employees experienced a decline in performance. Thirty percent had no change in their performance. Reviewing an employee's past performance and providing negative feedback can trigger a threat response and decrease performance. Setting goals in the form of tasks and discussing the achievement of those goals will result in more favourable performance outcomes.

More and more businesses today are realizing that science, and in particular neuroscience, is key to understanding and driving performance in the workplace.

Reference

Vorhauser-Smith, S. *The Neuroscience of Performance: People at Their Best*. Page Up People White Paper, July, 2011.

Elizabeth Bellavance, DVM, MBA, CMA, CEPA, is a member of the Board of Directors of VetPartners™, a member of the Veterinary Valuation Resource Council (VVRC), and a member of the Canadian Institute of Business Valuators. Dr. Bellavance can be contacted at Elizabeth.Bellavance@gmail.com.

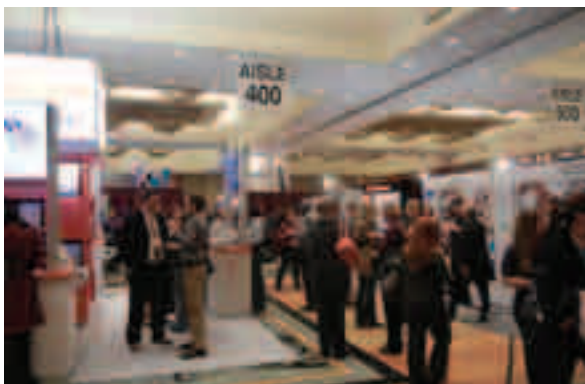


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The Exhibit Hall was a popular draw



Delegates get a demonstration at one of the booths



The small animal sessions were very popular

Dogs in workplace can relieve stress and encourage activity

Taking a dog to work can reduce stress for the owner as well other employees, according to a preliminary study published in the *International Journal of Workplace Health Management*.

There is a growing trend to allow pets in hospitals, nursing homes, and other health care facilities, and this is spreading to companies that report positive anecdotal reactions by employees and customers. These reactions are in line with research that supports the role of pets as a kind of social support which may extend to the workplace

to enhance interpersonal interactions, positively affect employee morale and turnover, and reduce stress.

The researchers compared employees who bring their dogs to work, employees who do not bring their dogs to work, and employees without pets, in the areas of stress, job satisfaction, organizational commitment, and support.

The study took place at a fast-paced for profit service-manufacturing-retail company located in Greensboro, N.C., which employs approximately 550 people. Approximately 20 to 30 dogs are on the company premises each day. The

study involved 75 employees and it took place over a period of one work week in the company setting, during which time participants completed surveys and collected saliva samples. Pagers were assigned to prompt employees to complete surveys during the day.

With regard to productivity, about 50% said their dog's presence improved their productivity while the other half reported a neutral response. The majority of dog owners not bringing their dogs to work and non-pet owners also reported a neutral response. However, approximately 20% in both groups reported the dog helpful or harmful to productivity.

The researchers did not observe a difference between the three employee groups on stress hormone levels, which was measured via a saliva sample in the morning, but during the course of the work day, self-reported stress declined for employees with their dogs present and increased for non-pet owners and dog owners who did not bring their dogs to work. The team noted that stress significantly rose during the day when owners left their dogs at home compared to days they brought them to work.

The researchers also observed unique dog-related communication in the workplace. For example, employees without a dog were observed requesting to take a co-worker's dog out on a break. These were brief, positive exchanges as the dogs were taken and returned and also resulted in an employee break involving exercise.

The researchers said, "Pet presence may serve as a low-cost, wellness intervention readily available to many organizations and may enhance organizational satisfaction and perceptions of support. Of course, it is important to have policies in place to ensure only friendly, clean and well-behaved pets are present in the workplace."

Further research with larger sample sizes within the organizational setting is needed to replicate the findings of this initial study.

Source

Barker RT, et al. Preliminary investigation of employee's dog presence on stress and organizational perceptions. *International Journal of Workplace Health Management* 2012;5:15-30. CV



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Industry News

Sled dog operator charged in wake of tougher legislation

In a case that sparked international outrage, a former sled dog operator has now been charged over the mass slaughter of dozens of huskies two years ago in Whistler, BC. The accused will appear in provincial court in May on a charge of causing unnecessary pain and suffering to the dogs.

According to Marcie Moriarty, general manager of cruelty investigations for the BC SPCA, the most complex investigation in its history was conducted at a cost of \$250,000, to determine whether some of the dogs suffered unnecessary pain or injury prior to death. Ms. Moriarty said “We found a number of instances where the evidence was sufficient to show dogs did not die instantaneously.”

The killings prompted the provincial government to bring in a new code of practice for sled dog operators in B.C. The legislation came after the slaughter of almost 100 sled dogs owned by an outdoor adventure company near Whistler, BC.

The new regulations are contained in the province’s Prevention of Cruelty Act. They establish legal requirements for things like housing, health, working conditions and euthanasia. People convicted of animal cruelty face a maximum \$75,000 fine and up to two years in jail.

“Sometimes it takes these tragedies to change legislation, to bring awareness to an issue, and that certainly happened here,” Ms. Moriarty said.

CVPM examination goes electronic

The Veterinary Hospital Managers Association (VHMA), which offers the Certified Veterinary Practice Manager (CVPM) designation, is pleased to announce that the examination is now offered electronically and is readily accessible to CVPM candidates across North America.

According to Christine Shupe, CAE, VHMA Executive Director, “The CVPM program is growing and as it expands, electronic testing will allow the test to be offered at a greater number of locations without compromising test security. The testing sites will be extremely convenient and accessible to residents of the United States and Canada.” Shupe also noted that the paper and pencil test format was labour intensive, requiring several proctors and, in some cases, extensive travel for candidates to sit for the test in designated locations.

Although the cost of the exam will increase to cover the cost of instituting computer based testing, it will be offset by cost savings for candidates who no longer have to travel to distant locations to sit for the test.

For more information about VHMA or CVPM, visit www.vhma.org.

New Iams Senior Plus

Iams celebrates the important role older pets play in our lives with the launch of Iams Senior Plus—a unique formula created to help pets 11+ large breed play longer.

As pets enter the senior life stage, they are more susceptible to loss of lean body tissue, a weakened immune system, reduced metabolic rate, and increased dental concerns. To support the needs of the pet during aging, Iams has developed a formula that specifically targets senior dogs and cats.

News Iams Senior Plus is designed to promote the quality of life as dogs and cats reach the senior plus stage. It addresses common senior health issues, including:

- Maintaining muscle mass
- Promoting ideal weight and body condition with a special formula that helps burn fat
- Boosting immune health to healthy adult levels with two times the antioxidants
- Maintaining healthy skin and coat health with Omega 6
- For dogs, helping to reduce tartar build up by up to 55 per cent with HMP (hexametaphosphate)



Bayer HealthCare launches ad campaign for pet owners

Bayer HealthCare is launching a national multimedia advertising campaign in key markets across Canada. The campaign was created to promote Bayer’s topical flea treatment, advantage®, to Canadian pet owners and encourage them to talk to their veterinarian about the risk fleas pose to their pet.

Bayer’s campaign objective is to inform dog and cat owners of the importance of effective flea control. It also directs owners to ask their veterinarians about advantage®.

Advertisements will reach television viewers in the spring and fall, reminding pet owners about flea season and asking them to visit their veterinarian. advantage® will also be advertised in transit shelters across Canada. Web banners encouraging pet owners to talk to their veterinarian about flea control will be placed on websites that animal lovers visit. Pet owners will be directed to www.nofleas.ca to learn more about flea treatment and control, urging them to discuss this with their veterinarian.

For more information contact Sophie Pilon at spilon@woodruffswitzer.ca.

Royal Canin introduces CALM™ diets

Royal Canin Canada recently introduced CALM™, a complete and balanced diet for maintaining emotional balance in dogs and cats. The new CALM™ diets may help relieve stress and anxiety in pets without using medication. They provide the proper amount of three unique ingredients to help reduce the pet’s anxiety and create an overall calming effect.

Canine and feline CALM™ diets provide nutritional support for pets in stressful situations such as fireworks, thunderstorms, moves, holidays, separation anxiety, etc.; provide support for pets undergoing behavioural therapy for anxiety; and provide nutrients for stress related skin and digestive disorders.



Vaccination Equi-Planner

Equine Guelph has launched Vaccination Equi-Planner, sponsored by Merck Animal Health. This is a useful tool designed for horse owners to generate personalized immunization schedules for their horses. Horse owners are asked to complete six questions that help determine individual farm differences and risk factors, including: age, use, sex, exposure to outside horses and geography. This data is then compiled in a program, and a printable customized vaccination schedule is provided for each horse. Owners are encouraged to review this with their veterinarian so that current disease patterns and individual circumstances are also taken into account for the best program to protect their horses.

To access the Vaccination Equi-Planner, see www.equineguelph.ca/education/equipanner.php.

Hill’s and CVMA launch Pet Dental Health Awareness campaign

Hill’s Pet Nutrition Canada and the Canadian Veterinary Medical Association (CVMA) recently launched the 2012 Pet Dental Health Awareness campaign (PDHA) to increase awareness of the link between oral and systemic health. “It takes combined teamwork from the health care team and the owner to ensure proper pet dental health is achieved,” says Susan M. Jones, D.V.M., director of veterinary affairs at Hill’s Pet Nutrition Canada. “The Pet Dental Health awareness campaign educates and rewards the team and the owner, but the dogs and cats who receive better oral care as a result are the real winners.”

The campaign rewards veterinary health care teams who take an active role in discussing the importance of pet oral health with their clients and includes a 2012 PDHA kit and reward programs. The kit contains materials for both the veterinary health care team as well as pet owners. The kit for the health care team includes a program guide, shelf talker system, counter mat and ceiling dangler. The kit for pet owners provides a brochure on proper dental care, pet toothbrush kit, brushing quick reference card and cardboard smile stick.

“The CVMA is pleased to partner with Hill’s again on this important wellness issue,” says Lloyd Keddie, D.V.M., CVMA president. “Proper dental care is extremely important to the overall well-being of dogs and cats.”

For more information and to register to qualify for rewards, visit www.petdental.ca.

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Western College of Veterinary Medicine Conference - Practical Cutting Edge Veterinary Medicine
www.wcvm.com/junecon2012

JUNE 14-15

CALGARY, AB

UCVM Beef Cattle Conference
beef@ucalgary.ca
www.vet.ucalgary.ca/beef2012

JUNE 28-JULY 1

SAN FRANCISCO, CA

Pacific Veterinary Conference
info@pacvet.net
www.pacvet.net

JULY 11-14

MONTRÉAL, QC

Canadian Veterinary Medical Association Convention
scunningham@cvma-acmv.org
www.canadianveterinarians.net/professional-convention.aspx

JULY 24-28

VANCOUVER, BC

World Congress on Veterinary Dermatology
www.vetdermvancouver.com

JULY 29-AUGUST 2

VANCOUVER, BC

International Conference on Animal Reproduction
info@icar2012.com
www.icar2012.com

AUGUST 3-7

SAN DIEGO, CA

American Veterinary Medical Association Convention
www.avmaconvention.org

SEPTEMBER 19-22

MONTREAL, QC

American Association of Bovine Practitioners Conference
www.aabp.org/meeting/conference.asp

SEPTEMBER 19-22

SASKATOON, SK

Saskatchewan Veterinary Medical Association Conference
svma@svma.sk.ca
www.svma.sk.ca

SEPTEMBER 27-30

BANFF, AB

International Sled Dog Veterinary Medical Association Conference
isdvma@isdvma.org
www.isdvma.org

OCTOBER 13-16

BANFF, AB

CanWest Veterinary Conference
midge.landals@abvma.ca
www.canwestconference.ca

OCTOBER 18-21

VANCOUVER, BC

Veterinary Hospital Managers Association Annual Meeting and Conference
admin@vhma.org
www.vhma.org

OCTOBER 21

EDMONTON, AB

Thoracic Radiology
Dr. Tim Spotswood
easav@edmontonvetinfo.com
www.edmontonvetinfo.com

OCTOBER 22-23

VANCOUVER, BC

41st Delta Equine Seminar
horsedoctor@telus.net

Email your meeting announcements to shelagh@k2publishing.ca

Canadian Veterinary Medical Association (CVMA) News

By Tanya Frye

CVMA Communications Manager

Order eggs, toast with a side of interactive breakfast at the CVMA Annual Convention!

The 64th Canadian Veterinary Medical Association (CVMA) Convention “*Learn à la Montréal*,” will be held from July 11 to 14, 2012 in Montréal, Québec. Two Interactive Breakfast Sessions will be offered to discuss client-patient relationships. The first session called “*3 Steps Toward Increased Efficiency and Profitability: A Treatment Plan for Your Practice*” will be held on Thursday, July 12, and the second session called “*S*** Clients Say*” will be on Friday, July 13. Both sessions run from 6:30 to 8 a.m. *Pre-registration is required for the session. Visit the Convention section of the CVMA website to register online today! Questions? Please contact Sarah Cunningham, Assistant, Conventions & Special Programs at scunningham@cvma-acmv.org or 1-800-567-2862 ext. 121.



CVMA position statements – role and utility explained (summary)

The CVMA National Issues Committee and Animal Welfare Committee develop position statements where there is adequate scientific basis and ethical concern to support the statements, and present them to the CVMA Council for approval and adoption.

These positions are meant to:

- Guide the profession
- Educate the public on the veterinary viewpoint on select issues
- Provide a “forward-thinking” viewpoint on issues based on what is happening not just in Canadian society and the veterinary profession but internationally

They are not intended to regulate the profession of veterinary medicine; however, it is recognized that provincial regulatory bodies may consider them when they update or amend veterinary bylaws (e.g., cosmetic surgery, veterinary dentistry).

The CVMA positions are used by our members, the public, and also the media. When specific issues arise, media outlets will frequently contact the CVMA seeking the current Canadian veterinary viewpoint. Some recent examples of this include issues related to puppy mills, animal abuse, euthanasia, antimicrobial use/resistance and vicious dog legislation. Position statements also form the basis of the CVMA media statements providing concise, scientifically based communications to the media.

CVMA conducts national survey on wellness of veterinarians

In the veterinary profession, stress and the danger of long-term exhaustion, or burn-out, are significant. The Canadian Veterinary Medical Association conducted a national survey amongst its members to obtain national data on the current situation of veterinarians in Canada regarding burnout and suicide. The general findings of this study will be presented at the 2012 Summit of Veterinary Leaders under the theme “*Member Wellness – The Art of Maintaining Your Sanity*”. The Summit will be held on Wednesday, July 11, 2012 during the CVMA 64th Annual Convention in Montréal, Québec and is open to all convention attendees. A subsequent summary report will be published in *The Canadian Veterinary Journal*.

Care for Cats promotes preventive healthcare for felines

According to Dr. Liz O’Brien, a board-certified feline practitioner from Hamilton, Ontario, pet caregivers need to know that cats, just like dogs, need yearly preventive health care. An initiative now entering in its second year, called *Care for Cats* is focusing its campaign this year on the very issue of preventive healthcare for cats.

Dr. O’Brien notes that the statistics show 58% of people who know their cat’s needs for professional care still do not bring the cat to the vet because of difficulty getting the cat there and once there, they may have a poor experience. Veterinarians are trying to help these clients now by educating them regarding proper use of comfortable cat carriers for transport, and training to transport safely with minimal stress. Veterinarians increasingly are respecting the adage “cats are not small dogs” in the way their clinics are designed and in how their cat care is implemented.

Care for Cats will once again declare May as the ‘purrfect’ month to raise awareness about the most popular pet – the cat. Throughout the month, and for the rest of the year, a number of resources will be available for download through www.careforcats.ca to help deliver a unified message about the campaign theme, as well as highlight the initiative’s other two messages: spay/neuter and identification and registration of felines.

The Canadian Veterinary Medical Association is working with Care for Cats in their vision to increase the value of owned, homeless and feral cats in Canadian communities.



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