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PRESIDENTS MESSAGE

Anthony Miele, DVM

Addressing the Future- Reflecting on a Transformative Journey



As we approach the end of 2023, I find it fitting to address a crucial and evolving topic that has garnered significant attention in our profession - Telemedicine. The emergence of telemedicine in veterinary care is a hot-button issue that demands our collective consideration and thoughtful response.

In the wake of the COVID-19 pandemic, the landscape of healthcare, including veterinary medicine, has experienced a rapid transformation. Telemedicine, once a peripheral concept, is now at the forefront of discussions at both state and national levels. As your VMANYC President, I believe it is imperative that we, as a united group, confront and deliberate on this matter.

In our upcoming and final VMA meeting for 2023, we will be forming a dedicated committee tasked with delving deeper into the intricacies of telemedicine in veterinary practice. This committee will be charged with researching, analyzing, and proposing a formal position that reflects the majority view within our Association.

I invite each and every one of you to contribute your insights, concerns, and perspectives on this critical issue. Your feedback will be instrumental in shaping the direction we take as an

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President's message continued ...

association. Our goal is to foster a collaborative environment where diverse viewpoints are considered, leading to a position that resonates with the majority of our members.

As my term as President of the VMANYC draws to a close, I am thrilled to reflect on one of our association's standout successes – the New York Vet Show. This event has not only integrated seamlessly into our program but has the potential to become a signature event, symbolizing the vibrancy and innovation of our Association.

The New York Vet Show encapsulates the essence of our commitment to offer the best continuing education in the greater NYC area with our local speakers. The two social events, the Big Apple Fall Mixer and the Paw-ty, were not just gatherings; they were unique opportunities for networking and fostering social connections among our members and colleagues.

A special shout out to all the speakers at the NYC Pavillon Theater at this year's New York Vet Show, Dr. Jonathan Ferrari, Dr. Becky Telle, Dr. Pamela Schwartz, Dr. Jonathan Goodwin, Dr. Jeanne Budgin, Dr. Andrea Minella, Dr. Joseph Campbell, Dr. Sara Lefman, Dr. Daniel Lantz, Dr. Joel Weltman, and Dr. Michael Lora-Michiels,

The Veterinary Medical Association (VMA) extends its sincere appreciation and gratitude to each of you for your exceptional contributions as speakers at this year's show. Your expertise and dedication significantly contributed to the success of the event, which saw a remarkable turnout and featured content that was not only valuable but also practical.

The positive feedback and enthusiasm from participants highlight the value of these events in creating a platform for meaningful interactions. I am pleased to announce that both the social and lecture series components will continue to be integral parts of our agenda in the upcoming years.

However, for these initiatives to continue to thrive, we need your support. Volunteers play a crucial role in the success of our events, and I encourage those of you who are passionate about shaping the future of our association to step up and lend a helping hand. Your time and dedication will contribute to the continued growth and success of the NYCVMA.

As we look forward to the future, let us build upon the foundation we've established and work together to make the New York Vet Show an even more significant and influential event in the veterinary community. If you are interested in volunteering or have ideas to enhance our events, please reach out. Your active participation is key to maintaining the momentum we've gained.

As I pen down my final farewell as the President of the VMANYC for the year 2023, I find myself overwhelmed with gratitude and pride for the incredible journey we've undertaken together. It has been an honor to serve as your President, leading a team of dedicated individuals who share a common passion for the advancement of veterinary medicine.

The landscape of Veterinary Medical Associations across the USA, and indeed globally, has faced unprecedented challenges, particularly in the aftermath of the COVID-19 pandemic. Many associations have witnessed a decline in membership and struggled to remain relevant in the face of changing times. Yet, against this tide, the VMANYC stands as a beacon of resilience, growth, and vibrancy.

President's message continued ...

I want to extend my heartfelt appreciation to the entire executive board for their unwavering support, commitment, and visionary leadership throughout my tenure.

Without their dedication, the VMANYC would not be the thriving and dynamic association it is today. Each member of the board has played a pivotal role in shaping our path, overcoming obstacles, and driving positive change within our association. A special thanks is also due to our esteemed committee members – Mari Morimoto, Christine Colamonico, Wendy McCulloch, Sally Haddock, Jennifer Tsung, and Po Ting Wong. Your selfless contributions, attendance at board meetings, and efforts to create innovative programs for our members have been invaluable. Your passion for our cause has significantly enriched the VMANYC, making it a hub for learning, collaboration, and progress.

As I step down from the role of President, I am confident that the VANYC is well-positioned to continue its trajectory of growth and impact. The seeds of positive change have been sown, and I am excited to witness the Association's continued success in the capable hands of our incoming leadership.

I extend my best wishes to the incoming President and the entire board, trusting that you will carry forward the spirit of innovation, inclusivity, and dedication that defines the VMANYC. Together, we have not only weathered challenges but emerged stronger, proving that unity and shared purpose can overcome even the most formidable obstacles.

Thank you, each and every one of you, for being an integral part of this transformative journey. It has been an honor and privilege to serve as your President.

2024 Holiday Party



Telemedicine for Veterinarians

Incorporating telemedicine into the veterinary field is indeed a promising development with numerous potential benefits. Telemedicine can play a valuable role in veterinary care, especially for animals like fish and other non-traditional pets. However, it must be used judiciously, with clear ethical guidelines and the understanding that it complements rather than replaces traditional in-person veterinary care, especially for cases requiring extensive examinations, procedures, or surgery.

Advantages:

1. **Improved Access to Care:** Telemedicine allows veterinarians to reach a larger patient population, including those who have difficulty visiting a clinic, such as elderly clients, clients with multiple pets or children, and owners of pets that resist travel.
2. **Reduced Stress for Pets:** Many pets become anxious or stressed when visiting a veterinary clinic. Telemedicine can reduce this stress, especially for cats, exotic animals, and large dogs. It enables examinations in a familiar environment, reducing the negative impact of transportation and unfamiliar surroundings on their health.
3. **Convenience for Clients:** Telemedicine provides convenience for clients, particularly for follow-up consultations, minor issues, or advice on pet care. House calls via telemedicine can also be an option, further enhancing convenience.
4. **Cost Savings:** By reducing the need for physical infrastructure and associated expenses, telemedicine has the potential to make veterinary care more affordable, which can encourage more regular check-ups and preventative care.
5. **Veterinary Technician Empowerment:** Telemedicine allows veterinary technicians to take on more responsibilities, including conducting initial assessments and client interactions. This can enhance their job satisfaction and professional development.
6. **Expanding the Veterinarian's Reach:** Telemedicine enables veterinarians to extend their services to underserved areas, both geographically and economically. This can lead to increased revenue and job opportunities for veterinarians.
7. **Reducing Student Debt:** As you mentioned, the high debt burden on veterinary students is a significant concern. Expanding telemedicine services can create new revenue streams, potentially leading to better salaries and job prospects for new graduates.
8. **Enhanced Care for Exotic Pets:** Exotic animals, which are known to be sensitive to handling and transportation stress, can benefit significantly from remote consultations. It also provides an opportunity to assess their habitat and husbandry conditions.

Challenges:

1. **Limited Physical Examinations:** Many pet owners may not take their fish or other non-traditional pets to a physical veterinary clinic. In such cases, telemedicine can be a way to provide some level of care and advice remotely. It's essential to educate pet owners on the signs to look for and the importance of early intervention when they notice something unusual in their pets.

2. **Diagnosis Through Observation:** Remote diagnosis based on videos and descriptions can be challenging, but it's better than no consultation at all. Veterinarians can make preliminary assessments and offer guidance to pet owners. However, they may still recommend in-person visits for more complex cases or when a physical examination is crucial.
3. **Diagnostic Limitations:** Telemedicine has its limits when it comes to diagnosing certain conditions that require physical examination, lab tests, or imaging. It may complement traditional in-person exams but cannot entirely replace them.
4. **Regulatory and Legal Issues:** The practice of telemedicine in veterinary care may be subject to regulations and licensing requirements that vary by region. Clear guidelines and standards are needed to ensure legal and ethical practice.
5. **Technology and Infrastructure:** Both clients and veterinary practices must have access to the necessary technology and internet connectivity for telemedicine to work effectively. This can be a barrier in some areas.
6. **Expanding Access to Care:** Telemedicine can indeed help reach a broader patient population, including those animals that may not have received veterinary care otherwise. This can be particularly beneficial in remote areas where access to veterinary clinics is limited.
7. **Training and Standardization:** Veterinarians should receive proper training in telemedicine practices, and standards should be established to ensure the quality and safety of remote consultations. This includes the secure handling of medical records and compliance with privacy regulations.
8. **Client Education:** Ensuring that clients understand the limitations of telemedicine and when it is appropriate versus when in-person care is necessary is crucial.
9. **Data Security:** Protecting the privacy and security of client and patient data is essential, as it involves transmitting sensitive medical information over digital channels.
10. **Ethical Considerations:** Veterinarians must maintain high ethical standards in telemedicine, including proper record-keeping, maintaining client-patient relationships, and adhering to established protocols.

Let's face it, none of these changes come easy, but we should not let the fear of change prevent us from adopting and accepting what will inevitably become the future of veterinary medicine. It is already established in the human health care setting, and our clients will expect the transition to the veterinary field for their pets. It is important to note that this would not be the first big change in veterinary medicine. Think electronic medical records, digital radiography, MRIs and CTs, and these are just a few examples of evolutions in the standard of care that were probably never even imagined decades ago. Technology, and thus societal standards, are changing on a near daily basis, and it is up to us as a profession to keep up with the times and the ever-changing expectations .

In conclusion, telemedicine holds great promise in the veterinary field, offering benefits such as improved access to care, reduced stress for pets, convenience for clients, cost savings, and opportunities for veterinarians and technicians. However, its implementation should be guided by clear regulations, ethical standards, and consideration of its limitations to ensure it complements traditional in-person veterinary care effectively.

Calendar of Events

Program Committee - Megan McGlenn, VMD

The schedule of the VMA of NYC Continuing Education meetings for the 2024 calendar year is listed below, including the speakers and topics. The meetings will start at 7:00 pm. Members must register prior to each meeting.

January 10, 2024 - 7:00 - 9:00 pm

Speaker: Andrea Looney, DVM, DACVAA, CCRP, DACVSMR
Topic: New Thoughts About Chronic Pain and Interventional Treatments
Location: STATE Grill and Bar

April 13, 2024 - CE in the City

Location: Convene

May 1, 2024 - 7:00 - 9:00 pm

Speaker: Stephen Cole, VMD, MS, DACVIM
Topic: Microbiology
Location: TBD

September 4, 2024 - 7:00 - 9:00 pm

Speaker: Jonathan Stockman, DVM, DACVIM
Topic: Nutrition
Location: TBD

October 9, 2024 - 7:00 - 9:00 pm

Speaker: Joseph F. Anelli, DVM, MS
Topic: The Small Animal Practitioner as a First Line Public Health Official
Location: TBD

November 7-8, 2024 - New York VET Show

Location: Javits Convention Center

December 4, 2024 - 6:00 - 8:00 pm

Speakers: Sarah Stephan, DVM, DACVIM / Thao Vo, DVM, DACVIM
Topic: TBD
Location: TBD

December 4, 2024 - 8:00 - 11:00 pm

Topic: Holiday Party

If you have any suggestion for a continuing education speaker or timely topic, please email the VMANYC at info@vmanyc.org.

Setting Healthy Boundaries

By Jennifer Tsung

Boundaries are a psychological fence that we set when interacting with other people. It is the line in the sand that is not to be crossed so that we can protect our emotional selves. At times, we deal more with people crossing our boundaries rather than respecting them. Setting healthy boundaries is crucial to maintain positive relations and self-care.

Boundaries are different for every person, and it depends on each person and the situation that they are dealing with, cultural influences and how they were raised. Being able to set a healthy boundary with others requires self-awareness. In my busy life, I am not aware of my boundaries until someone has crossed my boundary which was not set. Looking back at the uncomfortable moment then makes me think about putting in a boundary with a particular person and then possibly with all people in the future.

When we think about all our interpersonal relationships, there are boundaries we want to set with family, relationships, friends and at work. Boundaries at work in some ways are easier now in the veterinary field. There has been a big push with understanding burnout that veterinarians in general are getting better with scheduling time for themselves. The general interpersonal relationships at work are still the same. Dealing with angry and emotional clients and at times angry and emotional coworkers. An easy example of boundaries that we have to set with clients is when clients call to refill their medications or want extra medication on hand when they have not come in for an exam. Things get harder when client requests are followed by stories of family stress and financial hardships. As for co-workers, there are times where some colleagues never seem to finish their tasks leaving it for other people to finish. It could be easier to just finish the other person's work than to have a conversation with them. This may be fine in the short term, but these situations can cause stress in the long term if we don't eventually address them. Boundaries at work can foster more productive and less stressful work environments.

The steps to maintaining a healthy boundary start with understanding your needs and feelings. People who tend to avoid conflict or agree to things that they do not want to do need to strengthen their boundaries. This is harder for people who are introverted or have low self-esteem, but it must be done as a form of self-care. When we start to feel tense, resentful, or angry, it is time to move to the next step which is to set your boundary.

Effective communication skills are key to conveying your own feelings. Respectfully expressing your feelings to another is asserting your needs. Find a place and time for a conversation where you can express your feelings without anger and not raising your voice. The way to set your boundary is to

Wellness Corner continued ...

be polite and firm so others know what you want and need. It is also a way of saying 'no' to things that bother you. When we understand what our priorities are, we will be better able to know what things to say no to. You also need to accept whatever discomfort that arises from the conversation. It is not fair to be angry at another person about respecting your boundaries if it is not communicated to them. These days, it seems easier to set boundaries by ignoring calls or texts

The last part would be maintaining your boundaries. There needs to be a clear sense of what is acceptable. This can be hard as the boundaries we put up can be with some of the most important people in our lives. Whether our boundaries are soft or rigid may depend on the current situation. When your boundaries are crossed, watch for those negative emotions, and then work to control them while reasserting those boundaries.

The reason to understand and form personal boundaries is to be able to better control our emotional well-being while interacting more effectively with other people. With a healthy space around us, it will make us healthier and happier people.

What's Happening at NY SAVE



Pet Memorial Program

As a veterinarian you probably make contributions to veterinary institutions and/or human organizations in memory of clients' pets. NY SAVE invites you to join our Pet Memorial Program to help support our mission of funding the costs of emergency veterinary care for pets of New Yorkers unable to pay such expenses themselves.

We believe the NY SAVE Pet Memorial Program provides a most appropriate way for hospitals to show their appreciation of their clients by making a \$10 minimum tax deductible donation in memory of their beloved family members who have passed on.

When NY SAVE receives your tax-deductible gifts we send acknowledgements to your clients to let them know that you have made contributions in memory of their pets and that this program will help families who depend on NY SAVE in the future.

We hope that you will want to participate in the NY SAVE Pet Memorial Program by completing the enrollment form below.

With the help of these Pet Memorials, NY SAVE is able to provide financial assistance in an increasing number of cases.

If you have questions, please do not hesitate to contact NY SAVE headquarters at 917-669-7281.

We look forward to your participation - [Enrollment Form](#)



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¹ Frantz NZ et al. Novel food with mixed soluble fiber promotes quicker resolution of acute diarrhoea in shelter kittens. J Anim Physiol Anim Nutr. 2020; 104:406. ² Frantz NZ et al. Novel food with mixed soluble fiber promotes stool improvements and resolution of acute diarrhoea in shelter puppies. J Anim Physiol Anim Nutr. 2020; 104:406. ³ Frantz NZ et al. Novel food with mixed soluble fiber promotes improved stool scores in cats with chronic diarrhea. J Anim Physiol Anim Nutr. 2020; 104:406.

Mystery Canine Respiratory Illness

By George Korin, DVM

News has recently broken about a novel and emerging respiratory illness found in our canines. The clinical signs resemble most other cases of Infectious Tracheo-Bronchitis. However, the coughing, ocular discharge and periods of lethargy seem to drag on for weeks, with some dogs developing chronic pneumonia, and few developing an acute pneumonia that may lead to death. The illness does not seem susceptible to routine treatments, including antibiotics. All current testing has not uncovered any of the known bacteria and viruses that can cause any of the illnesses defined under the umbrella of Canine Infectious Respiratory Disease Complex (CIRDC).

Since the summer of 2022, initial outbreaks have occurred centered around New Hampshire, Rhode Island and Massachusetts. This summer Oregon became a focal point with over 200 incidents. As of this writing, cases have been reported in Colorado, California, Connecticut, Indiana, Illinois, North Carolina, Washington, Idaho, Georgia and Florida. In Canada Ontario and Quebec provinces have had a high degree of cases. One of the early principal researchers, David Needle, a vegetarian and senior pathologist at the New Hampshire Veterinary Diagnostic Lab, has been trying to solve the problem for over a year. A possible breakthrough occurred when a small segment of DNA found in lab samples from affected dogs in the New Hampshire samples revealed similarities to an atypical bacterium, likely a *Mycoplasma* sp. However, as of yet, the alleged infectious agent has not been able to be grown in culture, and therefore no susceptibility studies to determine an effective antimicrobial treatment has been determined. If it revealed to be a kind of *Mycoplasma*, it is surmised that Doxycycline might be effective as a drug. Anecdotally, there may be some evidence that Chloramphenicol may be of benefit as well. It is also not clear if these findings are also representative of the cases emerging from Oregon to Colorado. Scientist at several veterinary research labs are currently attempting to discover the connection. Other researches at Oregon State University, and Cornell University, believe that it is less likely that the causative agent would be a viral entity.

Last evening Nov. 30, Trupanion Pet Insurance sponsored a web cast featuring renowned veterinarians Drs. Michael Lapin, Scott Weese and Carrie Journey. Their perspective is that it is still possible that we are dealing with one of the so called known dozen or so organisms within the CIRDC. It may be that during the time of the Covid pandemic and the post Covid era, less dogs may have been updated on their immunizations and thus there is a general gap in immunity regionally. They assured us that the veterinary research community is working hard to define whether any new and emerging pathogens exist, or to isolate any currently known respiratory organisms, and that communication between and among national veterinary diagnostic lab is strong.

As we await the answers to this mystery illness, we as veterinarians must inform our worried clients as to what to do in the meantime. To mitigate any chance of disease, we ought to recommend that our canine patients be vaccinated for all preventable respiratory pathogens, including: Parainfluenza, Adenovirus, Bordatella, and Influenza. This is especially true for our brachycephalic breeds. Where possible, we can advocate to minimize contact with areas where dogs congregate: signs of respiratory illness and ensure that dog owners have their pets seen by a veterinarian in a timely way if respiratory signs persist.

For current information please use the following resources:

K9illness.trupanion.com

www.vet.cornell.edu/departments/riney-canine-health-center/canine-health-information/canine-respiratory-disease-outbreaks

New York City Department of Health & Mental Hygiene Focus Groups on Veterinary Infection Prevention

Dear Veterinary Providers,

The NYC Health Department is seeking volunteers for focus groups to discuss **infection prevention and control** in veterinary settings and an approach for preventing disease transmission among patients and workers.

We will be recruiting volunteers from NYC companion animal veterinary facilities who work in the following job roles:

- Veterinarians
- Veterinary technicians and assistants
- Kennel staff
- Office managers and front desk staff

Each participant will receive Amazon gift cards totaling \$40!

Complete the interest form by January 10, 2024, by going to <https://bit.ly/NYCvetfocusgroup> or scanning the QR code.



Participants will be selected according to availability and variety of job roles. Send any questions to IPC@health.nyc.gov.



Sincerely,

Bureau of Communicable Diseases
New York City Department of Health and Mental Hygiene



Perioperative Nonsteroidal Anti-inflammatories: We've Come a Long Way

Guidelines on the management of small animal pain have been published in the veterinary literature (Chou et al 2016, Hellyer et al 2007, Matthews et al 2014, Epstein et al 2015, Gruen et al 2022, Monteiro et al 2022, Steagall et al 2022); The concepts and points presented in this article are based on these guidelines.

Pre-emptive analgesia is the preventative administration of analgesic agents before a painful insult is inflicted. Opioids, nonsteroidal anti-inflammatories, and local anesthetics administered before the surgical insult are known to reduce nociceptive input, making surgery smoother for patient and surgeon; however, few folks realize that preop use actually prevents or reduces POST OP hypersensitivity of the procedure, that pesky central nervous system agitation which causes exponentially severe post op pain and the chronic irritation/pain of convalescence. **Multimodal approaches to pain control** involve the use of different classes of analgesic substances as well as non-pharmacologic therapies to provide reliable perioperative comfort without analgesic-related side effects. An example of this would be the use of a nonsteroidal anti-inflammatory with an opioid and local anesthetic to treat dental extraction or TPLO surgical pain. Because they target different pain mechanisms, lower doses of each drug category can be administered, minimizing the occurrence of adverse effects of any one of them. However, more importantly chronic symptom relief and even structural modification long term comes from multimodal approach, especially if NSAIDs are "in the mix" (Veronese N et al. 2022). In fact, in human patients, it is recommended that all patients receive a combination of local and/or regional techniques, non-opioid analgesics including acetaminophen, nonsteroidal anti-inflammatory drugs and even adjunct agents including dexamethasone (that's correct...WITH NSAIDS!!!!) to reduce intra AND post op pain. So, administering **many different drugs appropriately timed ahead of the surgery** we will provide long term effects toward the patients overall healing (Dickerson et al 1987, Woolf et al 1993, Kissin et al 2000, Dahl and Kehlet 2011). The WSAVA global pain council guidelines state (Matthews 2014): *"The most important time periods in which to curb a patients surgical pain are the preoperative and intraoperative periods – time periods when postoperative pain can be prevented, or very much reduced, via the concept of preventive and multimodal analgesia"*.

Why not simply use opioids for operative pain control? True, opioids are one of the most effective drug classes for preventing and treating acute pain. But, they do have their downfalls. For starters, the recent opioid crisis precipitated by diversion of potent injectable and oral opioids has resulted in less drug availability for small animal practitioners. Couple this with national weather and transportation/delivery issue, national backorders are common reality. Then there's the ever-obvious side effects of nausea, inappetence, urinary retention, narcosis, pupillary changes and hyperthermia in small animal veterinary species. Yet another ever growing and concerning side effect is that of opioid induced hyperalgesia (OIH), the paradoxical increased sensitivity to pain locally and systemically secondary to opioid administration (Mitra 2008). Also, of particular concern for veterinary oncologic surgery, is the fact that perioperative opioid use has been linked to increased metastatic rate, tumor recurrence and reduced survival times in human cancer patients (Casella et al 2022, Jajczkowska et al 2018, Singleton et al 2014). Even in non-oncologic disease, opioids have also been linked to increasing inflammation as well, Finally, opioid perioperative use has been found to cause a phenomenon called gut dysbiosis, underscoring their link to prolonged convalescence.

What about injectable NSAIDs for operative, surgical and procedural pain control? As mentioned above and supported in the pain management guidelines, the use of non-steroidal anti-inflammatory drugs (NSAIDs) in the prevention of surgical pain, as part of a multimodal approach, is critical to not only reducing the phenomena of opioid induced hyperalgesia, inflammation and gastrointestinal disharmony, but to also sparing the patient the need for POSToperative opioids. Patients are simply more comfortable without repetitive opioid administration if NSAIDs are used.

Several classes of nonsteroidal anti-inflammatory agents exist; most of these drugs provide their anti-inflammatory, antipyretic, analgesic and anti-thrombotic effects through the inhibition of the enzymes cyclooxygenase enzymes. Through the subsequent reduction in prostanoid synthesis which results from COX inhibition, redness, heat pain and swelling=signs of inflammation are reduced! A number of other more complex mechanisms of actions underly NSAIDs effectiveness including lipoxygenase inhibition, interference with G protein transduction, serotonin release, NMDA activity, and reactive oxygen species. Physiologic functions such as placental and gastrointestinal lining integrity, bronchodilation, renal perfusion, and platelet aggregation/adhesion depend on COX-1 enzyme. Since many common NSAIDs may inhibit this COX enzyme, clinicians worry about these essential physiologic functions especially on top of blood loss, altered coagulation, tissue low blood flow states typical of invasive surgery and vasodilatory effects of inhalant anesthesia.

Regardless of these potential worries, all of the established pain management guidelines noted above support injectable NSAID perioperative use unless contraindications (see below) exist. The risks and benefits, and the specific timing of NSAID administration should be evaluated on a case by case basis. Additionally, to prevent re-initiation of pain, treatment with NSAIDs should continue postoperatively for days until the inflammatory response is minimal.

Are the use of injectable surgical non steroidal anti-inflammatory drugs (NSAIDs) supported in the literature? Yes, excellent evidence exists. Let's take a closer look.

The human literature has examined and supported the perioperative use of injectable and oral NSAIDs in depth, mainly because they are opioid sparing postoperatively and appear to reduce side effects of the injectable opioids and inhalant anesthetics substantially.

The veterinary literature is also supportive for use of injectable nonsteroidal anti-inflammatory drugs in most small animal surgical patients. In fact, it is no longer a matter of IF to administer, it's now a matter of WHEN during the operative routine to administer them. Earlier literature supported NSAID use in **mostly healthy or elective small animal surgical populations**. Laredo (2004) compared meloxicam to carprofen both administered **pre**-incision to canine orthopedic patients, and found no significant changes in chemistry variables nor postop adverse effects in either group with solid pain scoring. **Pre**operative administration of meloxicam improved analgesia without clinically relevant adverse effects in cats that underwent onychectomy or onychectomy and neutering and provided safe, extended analgesia (Carroll 2005). **Pre**operative meloxicam has also been compared to robenacoxib in soft tissue surgery in cats (Kamata 2011) and in orthopedic surgery in cats (Speranza 2015) and both found meloxicam to provide analgesia without changes in blood chemistry variables. Carprofen administered IV **before** anesthesia did not cause detectable, significant adverse effects on renal function even with alpha agonists in protocol (Frendin 2006). **In low risk anesthetic patients and low risk surgical procedures, pre and intraop administration of injectable NSAIDs is recommended.**

Other literature even supports NSAID use in **lesser healthy populations**. Surdyk (2013) examined GFR of **cats with renal failure** administered meloxicam for 7 days; administration did not have a measurable effect on urinary clearance of exogenously administered creatinine, serum creatinine concentration, or UP:C. Mollenhoff (2005) examined efficacy and safety of postoperative carprofen in **clinical fracture cats** and noted no indication of any clinically relevant respiratory depressive or cardiovascular effects, nor of any undesired renal, gastrointestinal or hepatic effects in any patients. Bostrom (2006) noted carprofen administered IV before or during anesthesia did not cause detectable significant adverse effects on renal function or results of serum

biochemical and hematologic analyses in dogs **with low blood pressure during anesthesia**. Preoperative carprofen combined with mepivacaine epidural anesthesia had superior postoperative analgesia compared with postoperative carprofen (Bergmann 2007). There were no anti-healing effects when NSAIDs are used perioperatively and within the first 2 weeks post op (Gallagher 2019, Hedenqvist 2016). *In higher risk anesthetic patients and higher risk procedures, end of procedure (skin closure) or immediate post operative administration (pre extubation) of injectable NSAIDs is recommended unless contraindications to their use exist(see below).*

Should I continue to give my surgical patient NSAIDs postoperatively, both in hospital and at home? Yes!

Classically, **the switch from injectable to postoperative oral nonsteroidal usually** commences in veterinary patients with the first meal postoperatively. Evidence of continued (oral) NSAID improved analgesia without adverse effects exists for many surgical scenarios including dental extractions (Bienhoff 2011), enucleation (Delgado 2014), elective sterilization (Balmer 1998), orthopedic surgery (Mollenhoff 2005; Horstmann 2004), soft tissue surgery (Grandemange 2013, Bienhoff 2012, Friton et al 2017) and orthopedic surgery (Piras et al 2021, Davila et al.2013).

Though there is no guideline as to how long this postoperative use of NSAIDs should continue, most of the FDA approved NSAIDs (carprofen, firocoxib, deracoxib, robenacoxib) recommend periods of 3 days to 1-2 weeks as long as no contraindications exist or no complications arise.

NSAIDs are ideal for managing mild-moderate postoperative pain as **a take home medication**. They have the advantages of being convenient to administer (SID-BID, chewable), relatively inexpensive, FDA approved, and providing relief without opioid side effect (narcosis, decreased appetite, urinary retention, constipation) or gabapentinoid sedation. From Matthews et al (2014), *To prevent re-initiation of pain, treatment with NSAIDs should continue until the inflammatory response is minimal*. Omitting NSAIDs because of fear of adverse effects is discouraged in most patients, and may seriously compromise short and long term recovery (Steagall et al., 2022) And reliance on gabapentin as a solo agent for post op pain relief is not supported in the literature (Almeida et al 2023, Ruel and Steagall 2019).

What are the absolute and relative contraindications for NSAIDs? Patients with gastroenterotomies, clinical gastroenteritis, acute clinical renal failure (animals with pu/pd/pp, inappetence or vomiting, Cr>3.0), clinical asthma, coagulopathy, or hemodynamically unstable disease (heart failure, uncontrolled hemorrhage, shock) **should NOT receive injectable perioperative nonsteroidal anti-inflammatories**; these problems constitute absolute contraindications for the administration of the NSAIDs. Chances are these patients will not be going to surgery in most practices regardless. But if they do, these highest risk patients (ASA 4 and 5) as well as those at risk of severe hemorrhage (i.e., adrenal surgery) should likely NOT receive NSAIDS until fully stabilized or until eating. For these patients, other anti-inflammatories (lidocaine, bupivacaine, low dose ketamine, topical NSAIDs, cryotherapy, photobiomodulation (laser)can and should be utilized as anti-inflammatories.

An example of a relative contraindication and our “not if, but when” NSAID guideline might be the acutely traumatized hemorrhaged HBC patient. During the initial stages of fluid resuscitation, shock treatment, **injectable NSAIDS should NOT be administered**. However as soon as the animal has sufficiently regained volume and recovered independence from administered pressor agents, it will benefit from both injectable and oral NSAIDs; this will likely occur within 24-48 hours post trauma, when the animal is stabilized. Regarding ongoing bleeding potential and surgery, choosing an agent that is COX-2 selective for that species (e.g., carprofen in dogs or robenacoxib in cats) will limit interference with platelet function and still allow anti-inflammatory benefit.

Acute clinical hepatic failure (patient with low albumin, perhaps hypoglycemic, jaundiced, icteric, possibly with encephalopathy) is an absolute contraindication to administration of both injectable and oral nonsteroidals. However, chronic stable hepatopancreatic disease or liver enzyme elevation is NOT a contraindication

to administration of a NSAID. Contrary to commonly held concern, there is no evidence that pre-existing liver disease is a risk factor for the idiosyncratic hepatopathy reported with all NSAID drugs. In fact, if a patient has a hepatotoxic event from one NSAID class, changing to a different class may be an alternative. Although all approved NSAIDs depend on hepatic metabolism for excretion, the vast majority of dogs and cats with elevated liver enzymes do not have clinical compromise of liver function (as measured by serum bilirubin, albumin, BUN, and ammonia concentrations) and are unlikely to have impaired ability to eliminate the drugs (Hansen 2017).

Administration of a perisurgical NSAID to a pregnant C-section patient is made on a case by case basis. More recent studies have shown that carprofen would be acceptable for both periop and few day post op use (Ferrari et al 2022) in dogs, and robenacoxib as a single dose in cats requiring c sections.

Patients with clinical bronchitis (especially cats) will tend to have better anti-inflammatory control with a perioperative dose of steroids such as dexamethasone sodium phosphate vs NSAID. Likewise, patients with acute CNS disease (brain and or spinal cord injury) and or upper airway/lower airway disease (many brachycephalics) may better benefit ACUTELY from **steroid** anti-inflammatory effect instead of a NSAID; however, once stabilized switching to NSAIDs for post surgical care is rational. Controlled and non controlled cushingoid patients (who have excessive endogenous steroid production), appear to be very tolerant of injectable and oral perioperative nonsteroidal anti-inflammatories despite relatively high cortisol levels and paucity of studies regarding safety with this comorbidity. It may be safer in these patients to utilize a drug such as carprofen because of the propensity of coxib nsaid (robenacoxib, firocoxib, deracoxib) to increase thromboembolic potential.

Finally, perioperative injectable or oral NSAIDs are not recommended in dogs under 6 weeks of age.

Can other drugs be utilized instead of oral NSAIDs during the home convalescence period? The long term healing benefit as well as the short term reduction in inflammation and opioid use (all benefits of NSAIDs) will not be seen if drugs such as gabapentin, tramadol, amantadine, codeine and grapiprant are used INSTEAD of NSAIDs in the perioperative period. These other agents can be used as adjunct agents but be aware that they are not available in injectable forms, are not anti-inflammatory and some even lack efficacy as analgesics.

Summary

The use of injectable and oral NSAIDs to control surgical and immediate post-operative pain and reduce opioid use appears especially effective via controlled studies, pain management guidelines, and in this author's experience. Safety is based on avoidance in contraindicated scenarios and weighing of risk/benefit ratio on a case by case basis for higher risk cases. For acute peri surgical pain, opioids may still be the first line of analgesic therapy but injectable NSAIDs (e.g., carprofen, ketoprofen, meloxicam) should be co-administered with the opioid to exponentially enhance surgical analgesia, treat inflammation (something opioids cannot do) and to reduce opioid need postoperatively. For post op pain, NSAIDs can then be used orally and continued until inflammation is decreased (days to week). When further chronic (months to years of) administration is anticipated, the principle of titrating the dose down to its minimum effective level seems a prudent approach.

References available upon request: Andrea.looney@amcny.org

VETERINARIANS WANTED

Animal Endocrine Clinic (AEC) is looking for an enthusiastic new veterinarian to join our practice on the upper West Side of Manhattan. The AEC is a privately owned practice run by Mark E. Peterson, DVM, Dip. ACVIM. At the AEC, we specialize in diagnosis and treatment of thyroid disease, with most of our cases being hyperthyroid cats referred for diagnosis and treatment with radioiodine. At our practice, all thyroid cases have thyroid scintigraphy performed as part of their workup, and all 131I-treated cats are dosed using an individualized, calculated low dose of 131I.

With the goal of working less now and retirement within the next few years, Dr. Peterson looking for sometime to train to do the specialized workups and treatment routinely done at the AEC. Initially, this would be a part-time position, which would evolve into a partnership and eventual complete ownership of the practice. Once the associate is fully trained, they would be added as an "authorized user" to my NYC radiation license, and then take over and run my clinical 131I practice (as a practice owner). Of course, I would serve as a consultant and be available for as long as needed. If desired, endocrine, internal medicine, and/or feline referral practice could also easily be incorporated into this practice.

We are a cat-friendly practice and are dedicated to premier veterinary healthcare. Our AEC is set up in part as a clinical research center, and many of our cats enter into one or more ongoing clinical research programs.

Requirements: DVM/VMD with Licensure in good standing to practice in New York. Board-certification in ACVIM or ABVP (Feline Practice) preferred. Feline experience mandatory.

If interested in joining our practice and training under Dr. Peterson to develop this specialty, send resume/CV and cover letter of interest to drpeterson@animalendocrine.com. To learn more about our practice, visit www.animalendocrine.com or www.hypurrcat.com

Animal Health Group - Staten Island, NY and Veterinary Wellness Center - Brooklyn, NY. We are looking to expand our growing practices where we believe in mutual respect for each other, our clients, and their pets while still maintaining a fun and hard working environment. We embody a strong team approach to medicine and surgery, and are eager to mentor both new and experienced veterinarians. We strongly encourage independent thinking while offering uplifting support. Our practices are located in Brooklyn, NY, Staten Island, NY, Hillsborough, NJ and Branchburg, NJ, with all being only a short distance away from the heart of New York City. We are a family oriented clinic (NOT CORPORATELY OWNED) which is also reflected in our surrounding communities, which we have been proudly serving for many years. New graduates are encouraged to apply - we love to mentor and guide but we also love to learn from new graduates who have the most up to date knowledge of medicine.

We offer the finest medicine to our patients and clients in a friendly and clean environment, and are looking for a veterinarian with a positive attitude and lifelong love of animals as well as learning to join our team. We believe in building trust through honesty and compassion and are looking forward to adding a new team member to our practices. Our clinics are fully equipped and offer in house lab equipment, separate surgical suite, digital x-rays, ultrasound, dental x-rays, and paperless records to name a few, as well as excellent support staff! Attention to detail, excellent communication skills, and genuine care for our patients and their families are also important qualities we are looking for. Starting salary is commensurate with experience and includes four day work weeks, paid time off, uniforms, full time health benefits, paid CE, veterinary license, malpractice insurance, and DEA license. Flexible scheduling allows our associates to enjoy a healthy work life balance. No after hours or on call requirements! Ownership/Partnership options are available allowing enormous potential for personal, financial and professional growth.

Please send an updated resume and cover letter to Dr. Michael Arpino at hello@boerumhillvet.com highlighting why this is the ideal job for you. We look forward to reviewing your application!

VETERINARIANS WANTED

Westside Veterinary Center is looking for an energetic and compassionate associate veterinarian. A veterinarian who is confident in their ability to diagnose and treat complex medical cases. Westside Veterinary Center offers great mentoring because we have many experienced and knowledgeable veterinarians. We are one of the largest private veterinary hospitals in Manhattan established in 1985. Several of our veterinarians have been trained at the Animal Medical Center and at other advance training hospitals.

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If you are interested in job opportunity at Westside Veterinary Center please contact Dr. Karen Cantor, Director, at Cantor@westsidevetcenter.com or 212-580-1800 or 917-836-7417.

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Full or Part-Time. Veterinarian seeks work at small animal practice in New York City. NY licensed. Contact Eduarda Krieger, DVM at 917-239-3377.

Per Diem/Part-Time Veterinarian. Available most Mondays, Tuesdays, Thursdays and Fridays. Excellent people skills. Good practice builder. 35 yrs experience. References available. Dr. Tobias Jungreis at 516-295-1125.

Per Diem Veterinarian Available. 39 years of experience. Recently sold my practice after 33 years in the same location. Can perform most routine surgeries. No orthopedics please. Willing to travel up to 40 miles from central Nassau county. Call Paul Fish DVM 516-241-7278 or email PaulFishdvm36@gmail.com.

Relief/Per Diem Veterinarian. General practice. Orthopedic and Soft Tissue Surgery. DVM, Cornell. Internship Oradell. Residency in Small Animal Surgery, Cornell. Phone Dr. Kathy Sevala at 718-578-9085.

Relief Veterinarian. NYC Relief vet in Manhattan and Brooklyn. Lorelei Wakefield, VMD, internship-trained with 9 years of experience. Soft tissue surgery, dermatology expertise. NY/ DEA licensed. 917-930-8936. lorelei@wakefieldvet.com.

Relief/Per Diem Veterinarian. Available weekdays preferably in NYC. Over 30 years experience, excellent people skills, completed residency in surgery at the AMC in the 80's and good medical skills. Contact Kenneth Fein, DVM at 203-540-7771.

VARIOUS POSITIONS AVAILABLE

Animal Care & Control of NYC (AC&C) has many new and exciting job openings available at this time. If you love working with animals and helping people they may have a great career opportunity for you. Some of the positions that are available are Communications Associate, Volunteer Liaison, Veterinarian, Licensed Vet Tech, Animal Care Officer, and Animal Control Officer. If you are interested in learning more about the available positions or want to apply, please visit their website at www.nyacc.org.

Banfield Pet Hospital seeking Associate Veterinarians in New York! Leadership Positions, Flexible Full and Part-time Schedules! Banfield Pet Hospital is seeking Veterinary professionals for leadership positions, as well as full time and part time Associate Veterinarian positions with flexible schedules. As an Associate Veterinarian, you will be able to make independent medical decisions, continually grow and learn as a Veterinary professional, as well as fulfill a higher purpose by improving the quality of life for millions of pets across the United States. You will also have the opportunity to work alongside a highly trained team, providing the best preventive care possible for both clients and their pets, improving the quality and business performance of our veterinary hospital. A typical day for an Associate Veterinarian will include performing all surgeries, including the use of state of the art medical instruments and equipment. You will diagnose, treat and control diseases and injuries in pets, prescribe and administer drugs and vaccines and educate clients on all aspects of pet health, including Optimum Wellness Plans®. To hear more, or simply to see what we have available, call Andrew Cowley at (360) 784-5057 or e-mail Andrew.Cowley@banfield.com.

Bideawee, a leading pet welfare organization serving the metropolitan New York and Long Island, is seeking Associate Veterinarians to join our team in the Manhattan location. Associate veterinarians provide care for dogs and cats in our adoption centers including spay/neuter surgeries/dentals, as well as surgical and medical care for clients of our animal hospitals that is open to the public. The following is a list of essential job functions. This list may be revised at any time and additional duties not listed here may be assigned as needed: Wellness exams, preventative care, management of medical and surgical cases for shelter animals and client-owned animals; Performing spay/neuter and other surgery including dental procedures; Working with our trainers to manage behavior issues; Leading staff and volunteer training sessions in animal care; Participation in educational events held for the community or volunteers/donors; Some administrative work required. Requirements: At least 7 years of experience as a veterinarian; NYS veterinary license required; Shelter medicine experience preferred; Able to perform soft tissue surgeries including but not limited to spays and neuters of dogs and cats; Graduate with a DVM or VMD from a U.S. accredited veterinary school required.

InstaVet is a modern veterinary practice, with a focus on providing pets with top level care in the comfort, convenience and stress-free environment of home.. We are looking for an experienced veterinarian to join our growing team, serving clients at home, in the office or local preferred partner clinics. An ideal candidate would be someone who understands the value of administering care in the patients own environment, on demand... while remaining cool, calm and determined under extenuating circumstances. A team player fully invested in their colleagues' success...someone who takes enormous pride in their ability to listen and speak to clients like a trusted friend...a service-minded professional who is energized by the once in a lifetime opportunity to revolutionize the field of in home veterinary care forever.

Skills and Qualifications: A Doctor of Veterinary Medicine (DVM) degree, or equivalent, from an accredited university, Licensure in good standing to practice in New York or New Jersey; Professional demeanor and appearance, with excellent interpersonal skills and a positive, friendly attitude, The ability to make decisions and communicate clearly and effectively with fellow team members, A commitment to practicing the highest standard of medicine, upholding the veterinary code of ethics. Please note we have PER DIEM, PART TIME and FULL TIME positions available. Benefits include generous compensation, professional discounts on pet care, continuing education opportunities and more! Please reply with a cover note and attach your resume. To learn more about our services, please visit our website: www.InstaVet.com. Required experience: 2 years. Salary commensurate with experience. Salary: \$80,000.00 to \$100,000.00 /year.



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