



CANADA'S VETERINARY NEWSMAGAZINE

WINTER 2021 VOLUME 16, NO 1



Return undeliverable Canadian addresses to 18 Fireside Drive Hamilton, Ontario, L8N 2Z7 Publications Mail Agreement #41262570



Canadian Practice



CANADA'S VETERINARY NEWSMAGAZINE

WINTER 2021 VOLUME 16, NO 1

VET Keeping pets – and your practice – healthy in the age of COVID

By Naren Arulrajah



We spent most of 2020 trying to make the best of a temporary situation, eagerly anticipating the end of the pandemic and its fallout. Now, along with the arrival of long anticipated vaccines comes the realization that they are not enough. Increasingly, scientific experts are warning that eradicating the virus is likely impossible.

The situation may improve, COVID-19 may be relegated to a recurring epidemic, but it is not going away. Neither is the fear, and the impact it has on

consumer behaviors. Lockdowns are still possible, social distancing is still necessary, and people are still afraid to take their animals to your clinic. In other words, it is time to stop waiting for a return to normal and start adjusting to the new normal. Here are our top three strategies to help your veterinary practice recover and thrive in this uncertain economic climate.

The age of COVID continues on page 2

Table of Contents

- 2 Canadian Vet Advisory Board
- **4** VetLaw Responding to client complaints
- 7 Treating respiratory distress– a back-to-basics approach
- 8 Veterinary Business Today -Job factors contribute to burnout: addressing these issues in the veterinary practice
- **9** What's new in Lyme Disease prevention?
- **10** Case Study: Animal Welfare and Ethical Issues
- 11 CVMA News
- 12 Industry News
- **13** Veterinary Marketplace

Manual And ServicesAn esthesia and GDVs

Gastric Dilatation and Volvulus (GDV) is a life-threatening disorder involving a progression of bloat into a volvulus, in which the large, gas-filled viscus (stomach) fills the cranial abdomen, explained Shannon Beazley BSc, DVM, DACVAA, presenting at the Veterinary Education Today (VET) virtual conference. If not corrected with emergency surgery, she cautioned, *the endpoint of GDV is shock of many types*, including hypovolemic shock, endotoxemic shock, cardiogenic shock, and obstructive/distributive shock.

Signalment and history

GDV generally affects medium to large breed, deep-chested dogs. It has an acute or hyper-acute onset. Dr. Beazley explained that it is most often seen in dogs that have exercised vigorously after eating – such as a dog that ate a big dinner and then went to the dog park for a run. The tummy will look bloated and the dog will gag or retch as if trying to vomit, with nothing coming up.

Pre-operative assessment

Though assessment and preliminary diagnostics are important components of care when a patient presents with signs of GDV, the degree of pre-anesthetic preparation and what order you do things in will depend on the clinical state of the patient, advised Dr. Beazley.

Anesthesia and GDVs continues on page 3



Jessica McKay, RVT, stealing a puppy kiss!

How behavior affects meeting energy requirements of hospitalized patients



By Robin Saar RVT, VTS (Nutrition), National Nutrition Ambassador at Vetstrategy

There are many factors that may affect the ability of a hospitalized patient to ingest sufficient calories to meet its resting energy requirements, including pain, drug inhi-

bition, stress or anxiety, nausea, or unsavory choices and presentation of diets. These factors can emotionally, and physiologically, influence the patient's desire to eat. What is often overlooked is how our or the patient's behavior can affect the patient's desire to eat in a clinical setting.

Hospitalized patients continues on page 6



WINTER 2021 VOLUME 16, NO 1

Canadian 'ractice

CANADA'S VETERINARY TEAM NEWSMAGAZINE



Karen Tousignant Publisher, **Director of Sales** karen@k2publishing.ca



Jason Praskey **Art Director** praskeydesign@gmail.com

Other information, including change of address: info@k2publishing.ca

Publishing for veterinary professionals since 2005. Published four times annually by K2 Animal Health Publishing.

Proudly 100% Canadian owned and published.

Fach clinical article in Canadian Vet Practice is veterinarian/veterinary technician reviewed prior to publication.

Copyright 2021. All rights reserved. Printed in Canada.

www.k2publishing.ca

Canadian Vet Practice Advisory Board

Canadian Vet Practice is honoured to have the following distinguished veterinarians and technicians as members of our Advisory Board. In addition to imparting their knowledge and expertise on animal health issues, they often review article submissions, guide editorial topic selections, and help to keep the newsmagazine useful and relevant to veterinarians in Canada.















Trisha Dowling
DVM, MSc, DACVIM & DACVCP
Saskatoon, SK



Susan Little DVM, DABVP (feline) Ottawa, ON









Clayton Mackay DVM Nobleton, ON

John Tait BSc, DVM, MBA, CFP Guelph, ON



Tamara McLoughlin, RVT Saskatoon, SK







Steve Noonan DVM, CPCC Campbellville, ON



Kathy Stinson, RVT Sudbury, ON







The age of COVID continued from page 1

Embrace telemedicine

Most provinces allow veterinary telehealth, providing a valid VCPR (veterinary-client-patient relationship) exists. However, many veterinarians consider virtual visits to be a poor substitute for a physical examination, and a temporary solution at best. In truth, it can be a valuable addition to your services.

Do not think of telemedicine as a substitute for personal care, but rather an adjunct to it. Implementing telehealth has significant benefits for your clients, your patients, and your veterinary practice:

- Client convenience A virtual appointment is faster and easier than a trip to your office.
- Reduce patient stress Most animals experience some degree of stress in an unfamiliar environment, especially those who are not accustomed to riding in a vehicle or interacting with strangers.
- Gather valuable information Due to the stress, an animal will naturally act differently in your office than at home. During a video call you can observe the patient's behavior and actions when he or she is at ease. You can also ask your client to show you bedding and feeding areas, a cat's litter box location, or other relevant aspects of the patient's environment.
- Save canceled appointments Often, clients will cancel a visit due to scheduling conflicts, concerns about being out in public, or simply lack of time. When someone calls to cancel, you can offer to convert the appointment to a virtual visit.
- Make follow-ups easy Photos, videos, and chats with clients allow you to monitor a patient's post-procedure recovery without excessive office visits.
- Non-contact care Due to COVID-19, some people are not willing to leave home unless necessary. Many of them are foregoing medical

appointments, for themselves and their pets. Telehealth offers a safe, contact-free alternative. It can also reduce the number of people physically visiting your office, creating a safer environment for everyone.

Get social

The pandemic may have reduced human contact, but it did not diminish our inherent desire to socialize. In fact, social media consumption increased by 68 percent (measured in minutes) from January to March of last year. Furthermore, many people who shunned social media began embracing it to stay in touch with friends and family. These newly acquired habits are unlikely to fade.

What does this mean for your veterinary practice? Social media was one of the top digital marketing channels, and it is now more valuable than ever. Use it to stay in touch with existing clients, acquire new leads, and build your brand. Here are a few tips for social media success:

- Keep clients informed As COVID-19 related restrictions come and go, your hours, office policies, and services may change. Be sure to post about these changes and keep your followers in the loop.
- Promote your services You do not want your page to look like an advertisement, so post promotional material in moderation. However, social networks are a great place to inform people of your offerings, especially unique services such as telemedicine or house calls.
- Public education Tips for pet care, weather-related warnings, signs of parasites, and other educational content help establish your expertise and authority. Additionally, pet owners love to share information that they consider helpful or important.
- Happy and humorous is sharable The internet loves animals. Touching



stories, funny videos, and cute photos featuring animals rank as some of the most sharable content online.

Update your website

The best digital marketing strategies are multi-faceted, including social media, advertisements, and other channels. **However, that does not mean you can afford to neglect your website**. In fact, it is the hub of your online presence. How can you improve it?

- Perform an SEO audit Periodically check for basic issues such as slow loading times, broken links, duplicate content, missing meta tags, and technical errors.
- Add content regularly Google loves fresh content. The best performing websites are continually expanding or include a blog with regular posts.
- Keep information updated Make sure your services, staff, contact information, and other basic details are accurate. Also be sure to include any COVID-19 related changes.
- Optimize for voice search One of the fastest growing search trends is the

- use of voice technology. FAQ pages, article titles formatted as questions, and content written in conversational tone perform best with this type of search.
- Add visual appeal Include plenty of photos, graphics, and videos. Also make sure that your design is modern and visually appealing. If your site looks the same as it did a few years ago, then it is probably time to consider a redesign.

Conclusion

It might feel as if everything has changed. However, the basic formula for a successful veterinary practice remains the same. Provide quality service, meet the needs of your clients, and do not underestimate the importance of marketing.

Naren Arulrajah, President and CEO of Ekwa Marketing, has been a leader in medical marketing for over a decade. Ekwa provides comprehensive marketing solutions for busy veterinarians, with a team of more than 180 full time professionals, providing web design, hosting, content creation, social media, reputation management, SEO, and more.

Anesthesia and GDVs continued from page 1

First of all, the patient should be assessed to determine whether they are STABLE. A dog with GDV will present with pale and tacky mucous membranes, prolonged capillary refill time (CRT), elevated heart rate (HR) and respiratory rate (RR), blood pressure fine to elevated, *distended abdomen*, and dull and depressed mentation.

Preliminary diagnostics will include a jugular venous sample, ECG, and pain assessment. Hydration status should be assessed as it will often be elevated, resulting in hemoconcentration Electrolyte levels should be determined, as an imbalance may cause hyperkalemia or arrhythmias. Glucose may be high *or* low, depending on what stage of 'shock' the patient is in. PVO2 may be *low* from anemia, or it may *high* if the patient is septic.

An ECG should be performed to test for arrhythmias secondary to myocardial ischemia or electrolyte and acid-base disturbances. These can result in ventricular premature complexes (VPCs) and ventricular tachycardia.

Pain assessment will help determine if the heart rate is elevated due to pain or hypovolemia, and help determine likely response to treatment.

Stabilization

Stabilization of the patient is multi-factorial, involving administration of IV fluids, pain medication, decompression of the stomach, and anti-arrhythmic drugs. Dr. Beazley said that she will generally use 2 large bore cephalic catheters to administer 20-30 mL/kg crystalloids in about a 15-minute timeframe. Colloids may be considered, though Dr. Beazley noted that use is controversial due to recent evidence that this may contribute to acute kidney injury in humans. She said that hypertonic saline at 2-4 ml/kg bolus can also be tried. Ensure that the patient is not hyponatremic and that you are also administering crystalloids at the same time. Then, re-assess the patient, including heart rate and blood pressure readings.

Opioids are recommended to control pain. A Fentanyl bolus (5 mcg/kg IV) should be administered and then the patient's heart rate and mentation reassessed. To decompress the stomach, Dr. Beazley noted that a stomach tube may not be possible to pass if there is a complete 360-degree rotation. In this case, a percutaneous trochar can relieve pressure temporarily, but carries a risk of causing stomach wall tears and subsequent peritonitis. An anti-arrhythmic drug such as Lidocaine, can be used to treat ventricular premature complexes (VPCs). Once the patient is stable, Dr Beazley said, the diagnosis should be confirmed with radiographs, and symptoms re-evaluated.

Anesthetic management

Efficient anesthetic management of the GDV patient is key, stressed Dr. Beazley, as it will be critical to get into the abdomen as quickly as possible to decompress the stomach and take pressure off the diaphragm and vena cava.

Pre-anesthetic considerations include pre-oxygenating if the dog tolerates the mask, and pre-clipping if possible since the shorter the time from induction to surgery the better. It's important to place an ECG and monitor for arrhythmias continuously, noted Dr. Beazley.

In terms of pre-medication, drugs that induce vomiting or have negative cardiovascular effects should be *avoided*. OPOIDS IV will provide good sedation, analgesia and anesthetic sparing effect. Fentanyl (2-5 mcg/kg)

bolus has a short duration of action and can be given by continuous rate infusion (CRI) once induced. If arrhythmias are present, Dr. Beazley advised considering a Lidocaine bolus (2mg/kg IV).

Anesthetic induction

The goals of anesthetic induction are minimal cardiovascular depression and to rapidly secure an airway. Anesthetic selection and administration will vary depending on the patient's condition.

With the severely obtunded patient, neurolept-anesthesia should be administered. A *potent opioid* (Fentanyl or Sufentanil 2-5 mcg/kg IV) + *Benzodiazepine* (Midazolam or Diazepam 0.1-0.3 mg/kg IV) should be used. If this is not enough, a very low dose of **Ketamine** (0.5-1 mg/kg) can be added – but this is contraindicated with arrhythmias. Depending on how sick the patient is, you may be able to intubate off this combination, noted Dr. Beazley, and she stressed that suction should be ready and available in case of regurgitation or secretions in the pharynx which could complicate endotracheal intubation.

For the responsive patient, *Propofol OR Alfaxalone* alone offer a quick induction but will cause vasodilation. Adding a *benzodiazepine* allows you to decrease your dose of induction drug, but it will also prolong the duration of induction. It should be given after the patient is induced, said Dr. Beazley, and suction should be ready and available.

Maintenance of anesthesia

Drugs:

Anesthesia can be maintained throughout the surgical procedure with inhalation agents (isoflurane, sevoflurane). CRIs (opioids, Lidocaine) offer good anesthetic sparing and other benefits, shared Dr. Beazley. And she also recommended use of pressure support (inotropes and vasopressors) as well as administration of fluids.

Monitoring:

Blood pressure of the anesthetized patient should ideally be measured with an arterial catheter. As well, ECG, capnograph and pulse oximetry may be used to monitor the patient.

Other considerations:

Ventilation should be geared to high respiratory rate (RR) versus high tidal volume (TV) to maintain ETCO₂ and to minimize impedance on venous resistance (VR). Positioning of the patient should be Reverse Trendelenburg position (head elevated), and lazy lateral, in order to minimize pressure on the diaphragm and vena cava. Any necessary manipulation of the patient should be performed very carefully, advised Dr. Beazley, due to risk of rupture of the distended stomach.

Post-operative considerations

Continued monitoring of the patient is necessary after GDV surgery. ECG should be performed since ventricular arrhythmias can still develop up to two days after surgery, stated Dr. Beazley. Blood pressure should be monitored, and pressure support given if necessary. Analgesia may be given as necessary. And fluid balance should be maintained throughout the recovery period. CVP