

WEST COAST VETERINARIAN

DECEMBER 2020 | N° 41

DANGEROUS DOGS



TREATING BICEPS
TENDON DISEASE

CONGENITAL CARDIAC
DISEASE

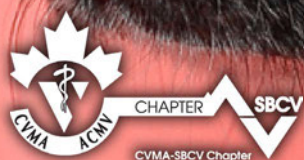
OTITIS IN ADULT
ANIMALS

PREVENTING
REGULATORY
COMPLAINTS

FIRING A CLIENT

WORKPLACE EXPOSURE
TO ANTINEOPLASTICS

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COREY VAN'T HAAFF
EDITOR

kitchen, and it was fun for me to find meals—delicious meals—that could be prepared with affordable ingredients and cooked in an electric skillet. I felt it was important to help these kids learn how to cook for themselves and eat affordably as they move into independence. I was asked to do this volunteer job when I invited that organization's executive director to my home for lunch, and she tasted my cooking. She looked at me and said, "Have I got a job for you!"

Cooking is important. It's also the foundation of my social life. Anyone who lives within driving distance has likely been invited to my home for dinner at one point. A few times a year, I would host large parties—up to 100 people—and spend three days cooking and preparing, as I themed my food selections, carefully chose which foods to make, how to display them, and how to set my buffet table (because buffets used to be permitted). I can cook Indian food, Mexican food, and Italian food, and I am up for trying almost any other type of food.

COVID-19 took all this away, but in the big picture, it is not a loss worth mentioning. Very early in November, I received a text from the Chapter's wonderful communications and admin coordinator, Adriana Silva. Her mom, who lived in Adriana's hometown in Mexico, had just passed away from COVID-19. There is no way to prepare for that text, as I am sure there was no way for Adriana to prepare for the phone call she had just received. My heart broke for her loss, knowing she was unable to go home and be with her family or be with her mom one last time to pay her last respects. The very real threat of COVID-19 makes it too big a risk for Adriana to travel. All of our hearts in the Chapter office and in the Board and Committees are broken for her.

» TO THE EDITOR

Letters from members are welcome. They may be edited for length and clarity. Email us at wceditor@gmail.com.

» ON THE COVER

Photo by Anna Krivitskaya/shutterstock.com

» ON THIS PAGE

Corey Van't Haaff with Rose the Moluccan cockatoo from the Night Owl Nest. Photo courtesy Dan Dickhout.

always wait to write the editor's message until I've read every word that everyone else has written. There's renewed talk about COVID-19 in this issue, perhaps because the virus is constraining our movements through society and our freedoms, even within our own homes, even more now that fall is becoming winter. Vaccine or not, this pandemic has affected each of us, and the effects will likely be lasting.

For me, social activities and my volunteer work are important. One thing I miss is teaching youth with mental health challenges or addictions how to prepare basic meals, using the community's new demonstration kitchen where I prepared the inaugural meal. I was lucky that I got to prepare the supply list to stock the

Email: wceditor@gmail.com

WCV
DECEMBER 2020

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CVMA-SBCV CHAPTER SCHOLARSHIP

Courtney Cameron

YEAR: Second
HOME: Victoria, British Columbia
CAREER GOAL: My career path in veterinary medicine is still flexible, but I am currently focusing my attention into both small animal and equine medicine with a particular interest in animal behaviour.
HOBBIES: I am involved in equestrian sports and the rehabilitation of rescue horses. I enjoy sailing around the Gulf Islands with my friends and family.

Courtney Cameron

"I am writing to express my sincere gratitude to you for the generous CVMA-SBCV Chapter Scholarship. I was honoured to hear that I was selected as the recipient.

I completed a combined BSc in Biology and Psychology at the University of Victoria prior to my acceptance to the WCV. As I continue down the career path of veterinary medicine, I am excited to become more educated in the world of production animal medicine and the associated welfare and behavioural aspects. Following graduation, I hope to return to Vancouver Island to practice.

By awarding me the CVMA-SBCV Chapter Scholarship, you have lightened the financial burden that comes with a professional education. The endless support that the veterinary world has for its students is remarkable, and I hope to return the favour in the coming years. Thank you again for selecting me as the recipient for this scholarship. Your contribution to my education will forever be appreciated."

MEMBER OF ASSOCIATIONS
Western College of Veterinary Medicine

CVMA-SBCV CHAPTER LEADERSHIP AWARD

Emily Liewen

YEAR: Third
HOME: Ladner, British Columbia
CAREER GOAL: I'm thinking mixed animal at this point but I'm still throwing around the idea of specializing in neurology or emergency medicine. I am considering doing the combined DVM-MBA degree, as I would love to own (or share in ownership of) a clinic one day!
HOBBIES: Soccer, hiking, camping, reading, photography, and embroidery.

Emily Liewen

WCV

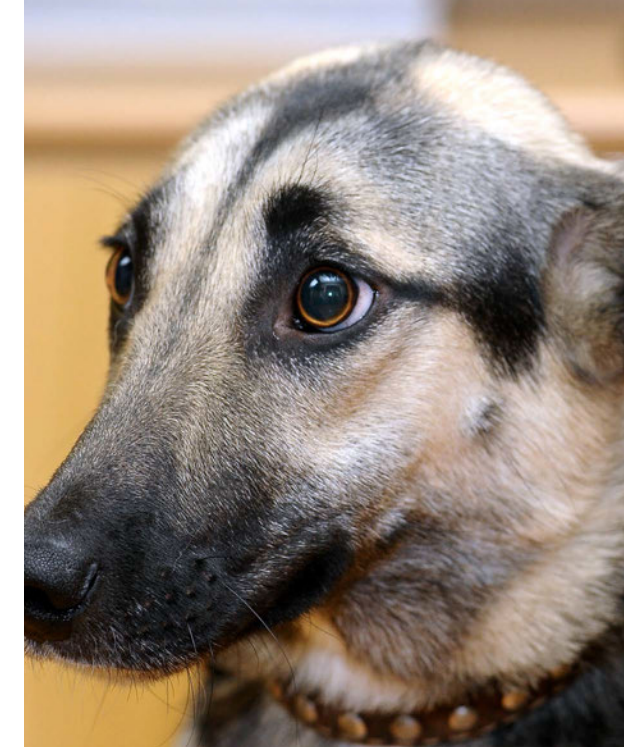
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22
DANGEROUS
DOGS



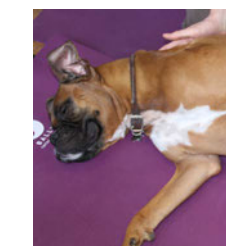
DECEMBER

- 04 FROM THE EDITOR
- 08 FROM THE CVMA-SBCV CHAPTER PRESIDENT
- 09 FROM THE CVMA PRESIDENT
- 10 IN MEMORIAM: BARBARA GOOD, DVM
- 12 FROM THE CVMA-SBCV CHAPTER WCV STUDENT LIAISON
- 14 A YEAR IN THE LIFE OTITIS IN ADULT ANIMALS
- 17 HELPING PEOPLE WITH ANIMALS WHO ARE FLEEING DOMESTIC VIOLENCE
- 18 THE WESTERN CANADIAN ANIMAL HEALTH NETWORK
- 26 SPECIALIST COLUMN INTERVENTIONS FOR CONGENITAL CARDIAC DISEASE
- 32 UBC LAUNCHES A STUDY ON ANTINEOPLASTIC DRUG EXPOSURE RISK IN BC VETERINARY PRACTICES
- 38 FROM UBC'S ANIMAL WELFARE PROGRAM STANDARDIZED TESTING IN THE SHELTER: RECENT RESEARCH SHOWS SOCIABILITY ASSESSMENTS TO BE PROBLEMATIC
- 40 WCV CONTRIBUTORS
- 40 WHO'S WHO IN THE VETERINARY WORLD
- 41 WCV BUSINESS DIRECTORY



16
FIRING
A CLIENT

19
FROM A LAWYER



34
DON'T CUT THAT—
IT MIGHT BE
IMPORTANT:
RETHINKING HOW
WE TREAT BICEPS
TENDON DISEASE

42
SHUT THE
DUCK UP



MINIMALLY INVASIVE SERVICES

LAPAROSCOPY is for viewing the organs of the abdomen. A small incision is made for insertion of the camera and then depending on the procedure performed, another 1 or 2 small access incisions are made for instruments. Commonly performed for spay, cryptorchid neuter, liver biopsies, adrenalectomy, gastropexy, some liver tumour resections, gall bladder aspirates, pancreatic biopsies, and sometimes cholecystectomy.

THORACOSCOPY is for viewing organs and pathology of the thorax. Small incisions are made for insertion of the camera and instruments, and positioning is very dependent on the procedure performed. Thoracoscopy is used for lung lobectomy, persistent right aortic arch ligation, thoracic duct ligation, flushing a pyothorax, auriculectomy, pericardectomy.

ARTHROSCOPY is for viewing the internal structures of a joint with only two tiny incisions, decreasing the amount of chronic osteoarthritis that develops postoperatively. The accuracy of diagnosing tears of the medial meniscus are increased with the use of arthroscopy compared to arthrotomy.

MINIMALLY INVASIVE OSTEOSYNTHESIS is a fracture repair technique that causes less disturbance to the soft tissues. Usually fluoroscopy is used as an aid. The blood supply is better preserved, thereby resulting in more rapid bone healing.

— — —

Dr. Sakals looks forward to helping support your patients and clients across the lower mainland. To learn more about Dr. Sakals, our services, and the rest of our specialty team, please visit our website or call the hospital at 604-879-3737.



Minimally invasive surgery is used to decrease the discomfort associated with a surgical procedure. These techniques are widely used in the human field, and we are increasingly using them for our veterinary patients. The magnification of the image display from the internal structures allows greater accuracy in diagnosis and treatment with a more rapid recovery and less postoperative morbidity.

Minimally invasive procedures are some of my very favourites, and I think the patients prefer them too!



Sherisse Sakals DVM, DACVS

Following her graduation from Western College of Veterinary Medicine in 2006, Dr. Sherisse Sakals completed a small animal internship in Saskatoon. She then transferred to Colorado where she completed a surgery internship.

In 2013 after completing her surgical residency at the University of Georgia, she became board certified in small animal surgery. Dr. Sakals then returned to Saskatoon, joining the small animal surgery faculty.

Recently, Dr. Sakals has been working as a locum surgeon at various specialty practices in BC and Alberta and at the University of Saskatchewan.

Dr. Sakals has particular interests in minimally invasive surgery for both soft tissue and orthopedic procedures including thoracoscopy, laparoscopy, arthroscopy, and minimally invasive plate osteosynthesis.

Outside of work, Dr. Sakals enjoys travelling, veterinary work abroad, running, and surfing.

We were all hoping to be seeing the tail end of COVID-19 by now, but it looks as if we will start the new year with more precautions. Most people are becoming used to the restrictions that the pandemic necessitates, but there are also a number of people who are very frustrated and stressed. Keeping a stable mental state has not been easy. My thoughts go out to each and every one of you and your families, and I sincerely hope that you are all doing well. Thanks for continuing to do your utmost to provide good service to the animals in our province. I know that it has not been easy.

During this year, we have lost many opportunities to personally interact with our friends and colleagues, as meetings have been cancelled or replaced by online gatherings via Zoom or other meeting software. Although this is a step up from teleconferences, it is not quite the same as face-to-face interaction. We have been fortunate in that most of us are adapting to getting our continuing education via Zoom, and speakers have been very helpful in still providing us with excellent sessions. As with some schools and universities, our continuing education in the future may use a combination of formats. After all, a six-hour continuing education program can get expensive for those who need to travel and pay for a hotel and food, and to take extra time off work or away from family. I have to give out a big thank-you for all the industry support we have received. Just as it has been difficult for us to practise, it has been equally hard on our industry partners. Please say thanks the next time you get to talk to a representative.

One of the yearly meetings that had to be cancelled was the WCVM White Coat Ceremony in Saskatoon. I'm sure a lot of you remember this as the event that welcomed you into our profession and provided you with your lab coat and stethoscope to get you going. The SBCV had also taken the opportunity to meet with the BC students to introduce them to the SBCV and the CVMA and explain the difference between us and the CVBC. This year our new student liaison, Madison Audeau, suggested we have a Zoom meeting. Our Executive Director, Corey Van't Haaff, set up the event and hosted it, and we invited Dr. Josh Waddington, CVBC Board president, and Dr. Jane Pritchard, CVBC interim registrar, to attend and give greetings. The evening went very well, although it only attracted 10 students. There were some good questions and comments in a relaxed atmosphere. We apologized for not being able to give the students food as we have done in the past (I suggested we could send them all some Kraft Dinner but we didn't get any takers).

At the student meeting, the majority of students were in first year. One of the topics that came up was how students could get summer jobs at practices. We suggested that the students make contact with clinics in the area they are interested in and introduce themselves. Although there are federal student payments, there are no provincial grant programs that we are aware of. Please consider hiring a student, as it exposes them to what practice is about and also gives them some funds to survive their student years and hopefully decrease their debt load at graduation.


Speaking of WCVM and students, I'm sure you all heard about the signing of the new five-year interprovincial funding agreement between Saskatchewan, Manitoba, and BC. Unfortunately, this agreement provides minimal increased financial support when the loss of Alberta's support is calculated in. Despite our attempts to persuade the BC government to cover the 20 open Alberta seats, BC has not taken advantage. WCVM has had to basically sell up to 25 seats to students able to pay an extra \$55,000 per year over and above the standard student tuition of \$11,000. This year, 16

BC students were able to get accepted to the college as well as the 20 seats covered by the interprovincial agreement. We will not give up and continue to press the government to provide funding for 40 students per year through the agreement.

As we have reached our 10th birthday, we have been reviewing our bylaws. Ten years ago, we included regional veterinary groups that could send representatives to the Board. This has not been all that successful, thus we are considering having the elected Board appoint representatives for geographical areas or species specialties. We hope to present new bylaws in the new year for you to consider. Once things settle down, please consider volunteering as, like any organization, the SBCV needs new people to keep it a vibrant organization that works for the profession.

We will continue to work on your behalf and represent our profession whenever needed. I want to take this opportunity to thank the Board that I am privileged to work with: Dr. Jessica Robertson, Dr. Robert Ashburner, Dr. Sarah Armstrong, Dr. Christiane Armstrong, Dr. Fraser Davidson, Dr. Paul Kennedy, and Dr. Marco Veenis. They are truly a group of dedicated people who contribute so much to keeping your organization moving ahead. I also wish to thank all the volunteers who work on our committees as well.

We all need to thank Corey Van't Haaff, our always busy executive director, for keeping the Society organized and for responding to inquiries from the public, media, government, and of course our members. I don't know if Corey ever has time to relax. We also thank Adriana Silva, our publisher's assistant, for all the work she does in communications with our members. We are fortunate to have two such dedicated people working for us.

I hope you all can have a good holiday season and an enjoyable new year—it will be better! 



Al Longair, BSc, DVM, graduated from the Western College of Veterinary Medicine in 1977. After graduation, he joined a mixed animal practice in Duncan, focusing on small animal practice from 1981 on. He has been involved with the BCSPCA for over 20 years, serving as the president of his local branch for 12 years and on the provincial management committee for 10 years, with four years as president. In the early 1990s, he served as chair of the CVMA Animal Welfare Committee. He lives on a small acreage with his wife, four horses, and four dogs and coaches youth soccer in his spare time.

As your CVMA president, it's my pleasure to provide you with updates on some of the CVMA's initiatives.

2021 CVMA AWARDS ARE OPEN FOR NOMINATION

Annually, the CVMA proudly recognizes individuals who demonstrated accomplishments, leadership, and commitment to Canada's veterinary community. The 2021 CVMA awards nominations are accepted until January 31, 2021. Award nominees (excluding honorary membership nominees) must be CVMA members; however, non-members can nominate. Nominate a colleague for one of CVMA's awards:

- CVMA Humane Award
- CVMA Industry Award
- Merck Veterinary Award
- Small Animal Practitioner Award
- CVMA Practice of the Year Award
- CVMA Life Membership
- CVMA Honorary Membership
- CVMA Life Membership

Please visit canadianveterinarians.net/about/awards for further information.

WATCH THE CVMA'S NEW SOCIAL MEDIA SERIES TAKE 5 WITH CVMA PRESIDENT DR. ENID STILES

Hot topics. Where are we going? Interviews from around the world. One common profession, one passion, one health: watch episodes of the CVMA's new social media series *Take 5 with CVMA President Dr. Enid Stiles* on the CVMA's Facebook or Instagram page.

WORKING TOGETHER TO PREVENT SUICIDE IN VETERINARY MEDICINE

The CVMA and Merck Animal Health held a webinar on World Suicide Prevention Day, September 10, 2020. Psychologist Dr. Elizabeth Spitzer discussed her findings from a comprehensive investigation of suicide among veterinary professionals, and Mr. Robert Olson, Centre for Suicide Prevention librarian, explained suicide prevention safety messaging in veterinary clinics and gatekeeper training. Access the free 2020 Canadian Suicide Prevention Veterinary Drug Safe sticker and view the webinar in the CVMA's Mental Health Awareness Resources webpage.

CVMA VETERINARY WORKFORCE WORKING GROUP

The Veterinary Workforce Working Group will recommend ways the CVMA can address forecasted veterinarian shortages in the best interest of the profession, clients, and patients, based on the 2020 CVMA Workforce Study results. The Working Group members are:


- Dr. Rob Ashburner, small animal practitioner, BC
- Dr. Phil Buote, deputy registrar, ABVMA
- Dr. Sherri Christie, mixed animal practitioner, ON
- Dr. Melanie Hicks, CVMA immediate past president
- Ms. Ivana Novosel, RVT
- Mr. Jost am Rhyn, CVMA CEO
- Dr. Karen Rodier, food animal practitioner, QC
- Dr. John Tait, veterinary business expert
- Dr. Jeff Wichtel, dean, OVC

CVMA DIVERSITY AND INCLUSION WORKING GROUP

The CVMA Diversity and Inclusion Working Group will:

- Formulate a diversity and inclusion definition relating to veterinary medicine in Canada
- Gather information on other national veterinary bodies' needs and responses to this issue
- Identify high priorities in addressing this issue further
- Support diversity within the Canadian veterinary profession and promote the treatment of all people with respect

The Working Group members are:

- Dr. Jim Berry, deputy registrar NBVMA, past CVMA president
- Dr. Melodie Chan, manager, Zoetis, large animal practitioner, and founder, CVMA Emerging Leaders Program
- Ms. Svetlana Ponsin, Students of the CVMA (SCVMA) president and CVMA council member
- Dr. Baljit Singh, dean, UCVM
- Dr. Malinda Smith, vice-provost equity, University of Calgary
- Dr. Charlotte Williams, past SVMA president 



Enid Stiles, BSc, MSc, DVM, completed a BSc in biology at the University of Ottawa before graduating with her DVM from the Ontario Veterinary College in 2000. Upon graduation and while working as a clinician, she went on to complete a master's in Clinical Sciences (Behaviour Medicine) at the

University of Montreal. Dr. Stiles has been fortunate to work with people and animals around the world as a founding member of Veterinarians without Borders Canada. She works closely with Montreal-based cat and dog rescue groups and has been a regular presence in print, television, radio, and social media in recent years, advocating for current national and international animal health issues. Her interest in veterinary behaviour medicine and animal welfare includes ending feline partial digital amputation (declawing) and teaching low-stress handling techniques in clinics. Dr. Stiles runs her own small animal practice, Sherwood Park Animal Hospital, with her husband Yannick Massicotte as co-owner and hospital manager. Dr. Stiles lives in Montreal with three children, a dog, two cats, and her husband. When she's not working, Dr. Stiles likes to go to the gym, ski, travel, and watch her children on the field or rink.

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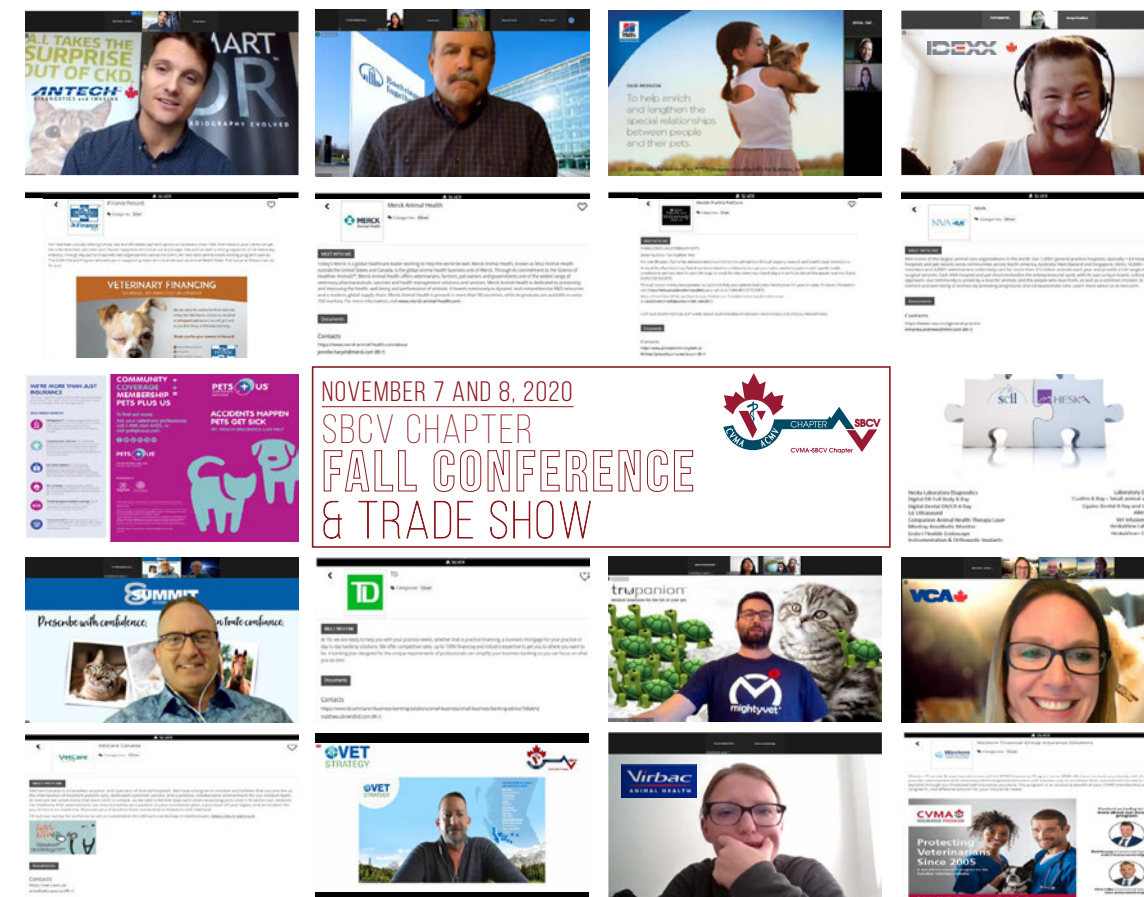
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FALL CONFERENCE & TRADE SHOW
EXHIBITORS

IN MEMORIAM

DR. BARBARA KATHLEEN GOOD
1948-2020

Dr. Barbara Kathleen Good left us on June 22 after a lengthy illness.

Barb was born in Vancouver and grew up in a career army family with postings across the country in Vancouver then Wainright, AB, Montreal, Ottawa, and back to Vancouver. Barb completed high school at Prince of Wales Secondary and graduated "With Great Distinction" from the Western College of Veterinary Medicine.

Barb was beautiful, vivacious, enthusiastic, kind, and brilliant. Barb progressed from a horse-crazy little girl to an accomplished rider and a successful equine professional.

Barb is missed by her partner, Jim, son Brian, daughter-in law Kristine, grandchildren Emily and Natalie, sisters Elizabeth and Jane (Donovan), her dearest friend Donna, who provided support during a dark period in her life, a large extended family, and many friends.

Donations to the Townsend Equine Health Research Fund (tehrf.ca) and the Heart and Stroke Foundation of Canada in Barb's honour are appreciated.

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CORONAVIRUS AND THE VETERINARY CLASSROOM: STUDENTS' EXPERIENCES DURING THE COVID-19 PANDEMIC

BY MADISON AUDEAU

“It is not the strongest of the species that survives, not the most intelligent that survives. It is the one that is the most adaptable to change.” —Charles Darwin

As students, when we excitedly accept our offers from the Western College of Veterinary Medicine, we undoubtedly come in with expectations. We anticipate attending classroom lectures, getting hands-on experience with animals, making new friends—but a global pandemic is something none of us had accounted for.

Last spring was a surreal experience for us as first-year veterinary students. One morning in late February, we were sitting in the same lecture hall where every morning began, settling in for a lecture on disease ecology and epidemiology. A casual discussion began about the novel coronavirus outbreak in China that had been increasingly receiving news coverage. Dr. Campbell began the class by asking for a show of hands from those who were concerned about contracting SARS-CoV-2 here in Saskatoon. Naively, none of us raised our hands. Little did we know that this virus we weren't too worried about would soon turn our veterinary education upside down. Within a few short weeks, the entire campus would be shut down as the faculty swiftly transitioned to offering course material in a strictly online format. Now, here we are the following fall, and things look much the same.

Of course, safety is and should be the number-one concern during this pandemic. I'd be lying if I said I wouldn't rather be writing this article about the latest goings-on around the college—conferences, field trips, and social events—but this year is unique. As nonessential in-person activities, including the White Coat Ceremony and club events, are largely on hold, students' experience of the WCVM feels different.

Second-year student Kaitlyn Wurzer from Surrey laments the opportunities lost this year. “Morning rounds in the VMC, on-call shifts for the Large Animal Internal Medicine volunteer program, owl banding, dehorning/disbudding labs, and lunch talks were all fantastic experiential learning opportunities,” said Wurzer. “I didn't realize how valuable and how many of these opportunities there would be when entering first year, and now it seems very unfortunate that those will not be available.”

Social contact between veterinary classmates this year is limited to smaller cohorts of 20 students, with whom we attend all on-campus labs. With lectures moving online, streaming hours of material from home every day can certainly be an isolating experience. Jenna Hewitt-Kenda, an incoming first-year student from Vancouver, shares the prevailing sentiment when it comes to missing the social aspect of school. “Although online meetings have been able to give me some ability to meet other students at the WCVM, it has been decidedly challenging getting to really know and connect with everyone virtually,” said Hewitt-Kenda. “Part of me feels disappointed that my classmates and I could be missing out, but most of me just feels grateful to have been accepted to the WCVM and enrolled at a school that prioritizes our safety.”

Apart from the changes introduced by the college, other consequences of this pandemic have affected veterinary students in several ways. Azy Behnam-Shabahang, a second-year student originally from Vancouver, manages online coursework while raising her two-year-old daughter. The closing of daycares and introduction of interprovincial travel restrictions complicated life for her and her husband, who's a rotational shift worker. “One of the dissipated options was having my parents travel from BC to SK to help with childcare between my husband's rotations,” said Azy. But at least doing lectures at home has also taken some of the pressure off. “The fact that I can coordinate my own schedule and re-listen to lectures has been integral in this juggling act of being an out-of-province mom and vet student.” Like all of us, she's grateful for the support of the WCVM's faculty during this challenging time. “In particular, I would like to thank our associate dean,

Dr. Chris Clark, for accommodating a 4 a.m. exam so that I could write it uninterrupted while my daughter slept.”

The WCVM faculty deserves a lot of credit for being remarkably supportive of students through all of this. They're working hard to deliver the same quality of education, which will allow our future employers to maintain the utmost confidence in us, while also trying to make this year's experience feel as *normal* as possible. Last week, I was streaming a pharmacology lecture while fidgeting at my desk to get comfortable with my cat on my lap—just in time to look up and see the lecturer pan his camera over, revealing a contented cat curled up on his lap too. We're all in this together.

Though this pandemic has presented many challenges to students, it hasn't been all bad. For many, the transition to online learning is a change they're embracing. Most of the coursework at the WCVM is now being offered asynchronously, and we can navigate through a lot of the material at our own pace and on our own schedules. First-year student Emily Holmes from Nanaimo is finding ways to look on the bright side. “Starting vet school, I'm finding I really like having online lectures because I like being able to re-watch them and pause to take notes, or replay a section I didn't understand. I feel like I am learning better this way.”

There have been other silver linings as well. For example, my alarm clock used to mock me at 6 a.m. every day, forcing me out of my warm bed and into the Saskatchewan winter to catch the bus to campus for morning lectures. Now, I get to laugh right back at it as I repeatedly hit the snooze until 8 a.m. This time last year, showing up for classes in full pajamas seemed like a surefire way to ruin any air of professionalism I have as a student, but now it's become a regular occurrence for most of us. And instead of having to jog to the nearest Tim Horton's on campus for coffee in the 10 minutes between classes, it's a much more leisurely walk to our own kitchens. Plus, it almost goes without saying, our dogs are thrilled to have us home an extra eight hours a day—though I'm sure my cat would prefer I get out of her office chair all day.

Transitioning to online learning has been the biggest shift for students in the first three years of the program with our noses in the books as we work on learning the *theory* of veterinary medicine. Yet, it has also shaped how senior students are able to navigate clinical rotations and begin their careers. For clinics, this pandemic has meant curbside care and the adoption of telemedicine, but it's meant something to us too. Juliet Cao, a fourth-year student from Vancouver, recalls the unexpected perks she gleaned after the small animal clinic she worked at last summer began offering curbside care. “Because clients weren't allowed to come into the clinic for the first few months of summer, I got to do physicals on all the patients and come up with a diagnostic plan,” said Cao. “My clinic is also usually very busy, so the longer appointment times due to COVID allowed the doctors to spend more time explaining their thought process when working up a case.” Having this extra mentorship investment from clinicians will surely provide a bit of a well-needed bridge between being a student and entering clinical practice. Several students who'd returned to BC for work last summer expressed gratitude for clinicians' extra guidance made possible by client-free exam rooms.

Now that online classes are back in session, we're always joking with each other about feeling like we're falling behind on the material or that there's not enough time in the day. But behind those casual quips lies some

real stress and trepidation. In an informal survey conducted by the Western Canadian Veterinary Students' Association's Pawsitive Practice initiative in September, the first-year class self-reported an average score of only 5.5/10 for emotional well-being. Student comments reported feelings of loneliness and that they don't have enough time for proper self-care.

When the boundaries between school and personal time begin to blur—because both are happening on the couch—it's so easy to become overburdened and neglect your needs. Earlier this semester, something occurred to me. I had been taking my dog to the dog park almost every day because I know how happy social time with other dogs makes her, but when was the last time I called a friend to catch up? Why was I not valuing the same social needs in myself?

During this time, it's more important than ever that we be vigilant about our mental health and carve out time between study sessions to take care of ourselves. We've been hearing about and witnessing firsthand the mental health crisis in our profession for years—long before COVID-19 came along. If we don't put ourselves first now, we can't be who we need to be for our future patients and clients. Exams can feel like the be-all and end-all of the academic experience, and the pressure we put on ourselves to achieve good grades is immense. We all want to do our best, but it shouldn't be at the cost of our own mental health. We could all stand to give ourselves a break once in a while.

Veterinary school is tough on a good day, and this evolving situation is putting all of our grit to the test. But, as we learned the first day of our undergraduate biology studies, to be successful in a changing environment doesn't mean being the smartest or the strongest, it's about finding new and clever ways to adapt. This pandemic has changed so much about the way we're training for our careers, but as veterinary students we've already demonstrated how adaptable we are. Every day we adapt to different species, different teaching styles, crazy exam schedules . . . and having the skills necessary to adapt to the challenges of this time will surely serve us well in our futures as veterinarians. **WCV**



Madison Audeau, WCVM class of 2023, is from Nanaimo, BC. She completed three years of a BSc in microbial biology at Vancouver Island University before coming to the WCVM and looks forward to returning to the BC coast as a small animal clinician after graduation.

BACKGROUND PHOTO BY LAURITTA/SHUTTERSTOCK.COM

HEY, BC VETERINARY PRACTICES: Why not hire a WCVM BC student this summer? They need hands-on experience and will benefit from your mentorship. Maybe you'll even meet your future associate. Call the office for details.

West Coast Veterinarian's "A Year in the Life" is a four-part column written by one veterinary specialist about one topic that has four distinct life phases. Through the course of the year, each instalment highlights how this topic affects animals at a certain life stage and what veterinarians should know about how to treat it. This year's focus is dermatology.

OTITIS IN ADULT ANIMALS

BY JANGI BAJWA, BVSc & AH, Dipl. ACVD

Otitis externa is a multifactorial disease in most patients. Generally accepted classification systems used for ear disease include primary causes and secondary causes. In addition, otitis may result from predisposing factors or may be affected by perpetuating factors. Primary causes are those that can create disease in a normal ear. Secondary causes create disease in an abnormal ear, adding to existing ear disease. Predisposing factors increase the risk of development of ear disease, whereas perpetuating factors contribute to persistence of otitis.

"PREDISPOSING FACTORS INCREASE THE RISK OF DEVELOPMENT OF EAR DISEASE ..."

During adult years, patients may be presented with variations in chronicity of ear disease. This can include acute ear disease without prior history of ear problems, or recurrent otitis that has only been temporarily or partially responsive to therapy. Chronic recurrent or persistent otitis with progressive otic changes in adult patients is another possibility, wherein a long-standing ear problem has remained unresolved.

Some primary causes for ear disease leading to presentation of adult patients to the veterinarian include:

1. **Cutaneous adverse food reaction** may develop at any age and often affects ears. Food allergy should be considered when patients

are first affected as adults without a history of prior ear and skin problems during their life. It should also be considered in patients presented with recurrent or persistent ear disease where an underlying allergic cause is suspected but is undetermined, or if prior dietary workup has not been performed.

2. **Canine atopic dermatitis** usually develops within the first few months to years of life, but may progress slowly and lead to recurrent or persistent otitis over adulthood and senior years. Patients presenting for otitis in specific seasons are likely atopic, although the condition can also affect patients year-round.

3. **Hypothyroidism** causes systemic signs including skin and ear disease, usually in middle-aged dogs. Ceruminous otitis may be present in hypothyroid dogs, along with secondary bacterial and/or *Malassezia* infection, and associated otic pruritus.

4. **Melanoderma and alopecia** of Yorkshire Terriers begins within the first few years of life, affecting the bridge of the nose and pinna bilaterally. Affected areas exhibit marked hyperpigmentation and alopecia with shiny skin, giving a leathery appearance (also called "leather ears"). Yorkshire Terriers affected by other conditions such as atopic dermatitis or hypothyroidism may show similar pinna changes, thus elimination of other diagnoses is vital.

5. **Insect bite dermatitis** can cause papules, erythema, erosion, and alopecia primarily observed on the thickened tip of the pinna. Small ulcers covered with hemorrhagic crusts may be present. The prevalence of insect bites, including mosquito bites, depends on the season, patient lifestyle, and climate. The nasal bridge and periocular area

Erythematous pinna with glandular changes and hair loss in an atopic dog.

PHOTOS COURTESY JANGI BAJWA

can also be affected.

6. **Aural hematoma** is caused by the traumatic rupture of vessels and capillaries within the ear pinna. Trauma may be induced from head shaking or scratching associated with otitis or allergies, or by a solitary blunt trauma episode. Discomfort and pain are common. Generally, the condition presents as unilateral, although bilateral lesions may develop. Over time, healing occurs with resorption of the fluid. Fibrosis is always a major feature of the aural hematoma healing process, especially if left untreated.

The classification systems used to understand and treat ear disease are quite useful during workup of each patient presented for ear problems. Such an approach should help achieve complete resolution (or at least, adequate management) of the various causes and factors involved in otitis for each individual patient. In the absence of such an approach, one or more primary or secondary causes and perpetuating factors will lead to chronic otitis. Chronic otitis is defined as persistent or recurrent otitis lasting for three months or longer. Chronic otitis may be noted irrespective of a patient's age. Chronic otitis can result in development of otic masses, rupture of the tympanic membrane, otitis media, ossification of the canal, pruritus, pain, hearing loss, and progressive hyperplastic changes of the ear canal including stenosis.

Secondary causes and perpetuating factors are not disease specific. They may be subtle at first but can develop and over time become the most severe component of chronic ear disease. Increased severity and a larger range of otic symptoms may become evident with progression, including negative effects of treatments necessary for patient comfort.

Ear problems that may result from unresolved otitis or from treatments instituted for control of otitis and other health conditions can occur at any age, but are presented in this section as they are more likely to be seen in adult dogs and cats due to the progression or persistence of ear disease in this age group:

1. **Acquired folding of the pinna** is a benign, non-painful condition reported in adult cats, occurring from long-term corticosteroid therapy. The apex of each pinna folds rostrally and laterally.

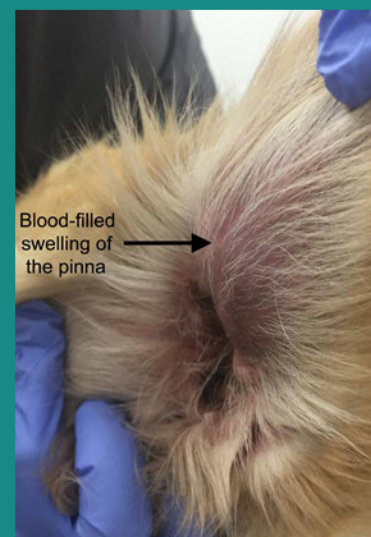
2. **Ceruminolithiasis** (otic wax plugs) occurs if the self-cleaning mechanism (epithelial cell migration) of the ear canal is affected, typically due to otic infection or other trauma to the tympanic membrane. Otic wax plugs may act as a nidus of infection within them, and can lead to patient discomfort. Some patients may remain asymptomatic, and ceruminoliths may be found on routine ear assessment.

3. **Cutaneous adverse drug reactions** can occur from any oral or topical drug use, including drug vehicles. Some drugs that preferentially induce pinna lesions and/or pinna pruritus include methimazole, penicillins, and cephalosporins. Neomycin in topical otic products may cause contact drug reactions on ears.

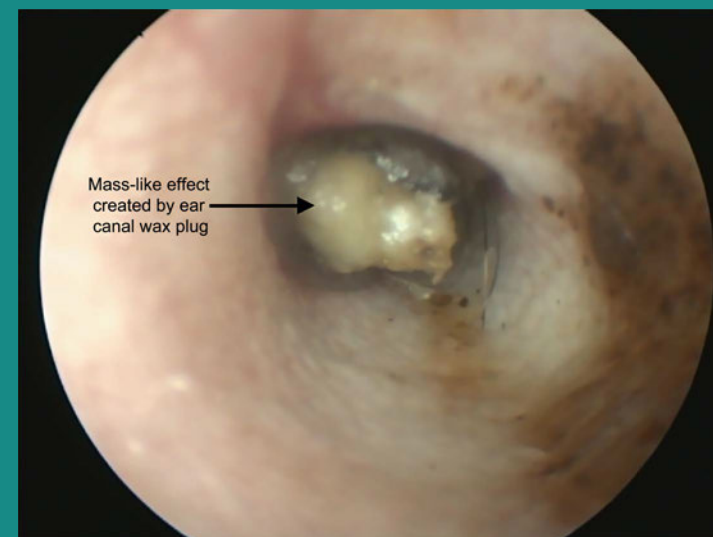
4. **Otitis media** is a common complication in patients affected by chronic otitis externa. Otitis media often acts as a perpetuating factor in unresolved ear disease. The tympanic membrane may be ruptured, although visualization of an intact tympanum is not a rule-out for otitis media. Otitis media may be unilateral or bilateral.

5. **Otic masses** may develop secondary to inflammatory changes in the ear canal and will be covered in more detail in the final section of this series.

6. **Hearing loss** is another complication of chronic ear disease and may occur with other chronic complications such as otitis media and otic masses. Administration of topical otic treatments may also cause hearing loss. Generally, conductive hearing loss is observed and may be reversible. [WCV](#)



Aural hematoma in a dog.



Ceruminolith in a cat's ear canal.



Pinna tip curling due to corticosteroid use.



FIRING A CLIENT

BY NICOLETTE JOOSTING, BSc, BVSc, DVM

“I am afraid,” Dr. Doe said firmly, “that we can no longer help you and your dog. You need to seek veterinary care at another practice.” Dr. Doe had struggled through three appointments where the client had questioned the veterinarian’s intelligence and choice of career, accused the clinic of overcharging for each service, and even accused the staff of being a pack of uncompassionate shysters, just in it for the money. It was a difficult decision, but it had become clear that no one in the practice could work with this abusive client any longer.

Dr. Doe took a deep breath, stepping back as the enraged client inhaled for a further outburst. “If you don’t leave now, I will call 911,” they managed to say, reaching for the phone, before the client could say anything. The client grabbed the dog’s leash roughly, yelling about suing Dr. Doe, suing the clinic, and posting on Facebook. They left just as the 911 dispatch operator answered the phone.

“I hope you wrote up that file right away,” said Dr. Zee, a veterinarian who worked in a different clinic. “Did you file a police report about the threats?” The two veterinarians were meeting for their usual weekly lunch, a few days after the incident.

“No.” Dr. Doe’s hand shook lifting the coffee mug. “I just couldn’t. It was awful. The owner was just screaming at me. That was the first time I have fired a client. Maybe I should not have done that—the dog needed veterinary care. It’s so hard. I just keep replaying the whole thing in my head.”

“Listen,” said Dr. Zee. “This is important. All of us have to fire clients at some point. But you need to do certain things to make sure the animal is cared for and to protect yourself if the client comes after you. What if they file a complaint with the College?”

“Well, it is my right to choose my clients. The College can’t dispute that!”

“Sure, but the College is there to protect the public, right? So if they feel there was harm done, or the bylaws were not followed, they may start an investigation. If the dog needed urgent care or suffered because you refused care and another veterinarian couldn’t take over immediately, then that is a problem.”

Dr. Doe stared, sad and stunned. It seemed the whole world was closing in, threatening, especially when the realization hit that the dog might have suffered. Dr. Zee

leaned forward. “Look, it’s our afternoon off. Why don’t we pop into the office and just get all this sorted out right now?”

Back at the clinic, Dr. Doe opened the client’s file. Prodded by Dr. Zee, Dr. Doe wrote up the incident, making it clear that the writeup was from memory, a few days after the event. They filed this, dated and signed, in the communication section, to keep it separate from the dog’s medical notes. As Dr. Doe did this, they saw that another clinic had requested the medical records that morning. Thankful that the dog had received medical attention, Dr. Doe left a note asking the veterinary technician and receptionist involved in the incident to write up their versions of the event. “Better late than never,” Dr. Zee commented. “But it can always be questioned why you didn’t do this until now. People remember different versions of an incident—memory cannot always be trusted. Next time you will know to do this right away.”

Next Dr. Zee opened the CVBC website, showing Dr. Doe where to find the information to complete the next steps. “It’s in the Veterinary Client Patient Relationship Standard, so you have to sign in, and then go to Resources. Now click on Registration, Standards and Policies. You have to scroll down to the VCPR part.”

“Oh,” exclaimed Dr. Doe. “What do they mean by this—‘Provides a client with adequate notice of termination of the VCPR?’ I just told the client. I didn’t really do all this other stuff, like, ‘Allowing the client a reasonable amount of time in which to arrange for care with another veterinarian . . . This includes designating a period of time for which emergency services will be provided, and ensuring the appropriate transfer of medical records.’”

“Here, it’s in the Guide to the VCPR Standard.” Dr. Zee opened the document at portal.cvbc.ca/wp-content/uploads/2020/03/Guide-to-the-VCPR-Standard.pdf and found the section “Frequently Asked Questions Regarding the Termination of a VCPR.” Dr. Doe read the description of the termination process and sighed.

“I guess I have to write that termination letter. I hate doing stuff like that. I am absolutely going to use the sample termination letter in this guide!”

A while later, Dr. Doe closed the client’s file and patient records with satisfaction. The termination letter had been emailed to the client, along with a copy of the dog’s medical records and a note that the clinic had transferred the medical records to another veterinarian. The letter and email were documented in the file, and a printed copy of the letter in an addressed envelope was ready to be sent by registered mail the next day.

“I feel bad for the dog that I didn’t make sure prescription refills and emergency care were taken care of until the client found a new vet. Can you imagine if that dog had needed more urgent or ongoing care?” Dr. Doe shuddered. “There’s definitely a timely and professional way to do this—and now I know where to find the guidance.” [WCV](#)

HELPING PEOPLE WITH ANIMALS WHO ARE FLEEING DOMESTIC VIOLENCE

BY LOUISE LATHEY, BLES

Survivors of domestic violence who have pets often delay leaving their abusers if they have nowhere to take them. This is a topic that has been studied across North America and internationally. It is an animal problem, a human problem, and a community problem.

You would think that since we have statistics that show this issue—that 18 to 56 per cent of women delay leaving—there would correspondingly be a decisive solution and an abundance of resources. There are not. Many transition houses, emergency shelters, and other types of facilities for survivors do not allow pets for a number of reasons. Therefore, the availability of aid for the survivor becomes irrelevant if it is not an all-encompassing aid that includes their pets.

Luckily, as this issue is brought more and more out of the dark and is being observed by varying agencies who aid domestic violence survivors, other organizations are stepping up. Specifically, animal welfare organizations are helping people (who are leaving their abusers) by also helping to care for their animals, thereby alleviating that additional stress.

It is important for veterinarians to be aware of the resources in your area. Connecting with these organizations would be a great opportunity to build relationships and work as a community to help vulnerable people and pets.

The BCSPCA offers an emergency boarding program in shelters across the province where survivors fleeing an abusive situation can board their pets for up to two weeks. Extensions may be granted on a case-by-case basis and can extend into foster care depending on the circumstances.

Paws for Hope recently launched the No Pet Left Behind Program, an emergency foster program in the lower mainland. Survivors are able to leave their pets with a designated foster family coordinated by Paws for Hope. Length of stay is initially three months with the possibility of extensions.

BC211.ca is another resource that can help survivors with pets. Their website offers a search option where the survivor can specify where they are and what they are looking for specifically. They can also call and speak with a representative who may be able to guide the survivor in the right direction if they cannot find the necessary resource on the website.

According to BC211’s annual report of 2018, their government-contracted helpline, VictimLinkBC, received approximately 3,200 calls about domestic violence spanning 134 BC communities. Of these calls, 2,000 were from survivors looking for housing. According to BC211 staff, approximately 30 per cent of survivors who call in and are fleeing domestic violence have pets. They note that finding space in transition houses can be hard enough, but adding pets to the mix decreases housing options even further.

BC211 offers an entire range of resources outside of housing in areas including addictions, financial assistance, mental health, and education. There is also support tailored to young, elderly, Indigenous, and LGBTQ+ people. In all of these categories, the survivor can narrow down which service they are seeking.

For specific cities and shelters that accept pets or have pet-friendly resources, visit safeplaceforpets.org. This website allows the user to search by city and see what pet-friendly housing resources are in their area or close by. This website does get updated; however, it is important to note that some locations may not advertise that they accept pets due to overwhelming inquiries. See our list (at right) of some resources that may allow pets.

Though there are a variety of options, they are still quite limited and dependent on the situation, type of animal, and so on. However, for veterinarians to familiarize themselves with these resources is a great first step in helping a survivor leave the unsafe situation they are in and find a safe place for their pet. [WCV](#)

SOWINS TRANSITION HOUSE/SOWINS SAFE HOMES On-site	Penticton
VIRGINIA SAM TRANSITION HOUSE On-site	Surrey
WESTCOAST TRANSITION HOUSE On-site	Ucluelet
WILMA’S SECOND STAGE PROGRAM On-site	Chilliwack
SOMENOS TRANSITION HOUSE Off-site	Duncan
ANN DAVIS TRANSITION HOUSE On-site	Chilliwack
ANNIE’S PLACE TRANSITION HOUSE Off-site	Sooke
ATIRA WOMEN’S RESOURCE SOCIETY On-site	Vancouver
FORT ST. JOHN WOMEN’S RESOURCE SOCIETY—SKYVE’S PLACE On-site	Fort St. John
JEAN SCOTT TRANSITION HOUSE On-site	Hope
KELOWNA WOMEN’S SHELTER On-site	Kelowna
KSAN TRANSITION HOUSE On-site	Terrace
ISHTAR WOMEN’S RESOURCE SOCIETY: LIBRA HOUSE AND ISHTAR HOUSE On-site	Langley
AMBER HOUSE On-site	Prince George
PASSAGE TRANSITION HOUSE On-site	Smithers
PEARL’S SAFE HOME On-site	Squamish
WINS TRANSITION HOUSE On-site	Trail
DIXON TRANSITION SOCIETY Dixon House Transition House, On-site	Burnaby
SAGE TRANSITION HOUSE On-site	North Vancouver
PAWS FOR HOPE ANIMAL FOUNDATION No Pet Left Behind, Off-site	Maple Ridge
SALMON ARM WOMEN’S SHELTER On-site	Salmon Arm

THE WESTERN CANADIAN ANIMAL HEALTH NETWORK

BY BARBARA WILHELM, PhD, DVM

The World Organisation for Animal Health definition of surveillance is “the systematic ongoing collection, collation and analysis of information related to animal health and the timely dissemination of information so that action can be taken.” Within the broad area of surveillance, several more specific activities are usually recognized: estimation of the prevalence of a pathogen or disease syndrome, documentation of freedom from a specific disease, early detection of a pathogen or disease syndrome, and detection of new cases. In Canada, a variety of surveillance initiatives have been undertaken federally, provincially, and regionally to perform some or all of these activities, including active surveillance for specific disease hazards, passive laboratory surveillance, provincial or regional activities, and some sector-specific animal health surveillance networks.

In 2014, the National Farmed Animal Health and Welfare Council and the CFIA announced a plan to develop a “network of networks” to incorporate existing surveillance activities and develop new programs or systems as needed, with the aim of improving and better coordinating overall animal health surveillance in Canada.

Recognizing that individuals within provinces or regions share common interests in animal health, regional animal health surveillance networks have existed in Canada for decades, with le Réseau d’alerte et d’information zoonitaire (RAIZO) in Quebec being the longest-established network. The Ontario Animal Health Network (OAHN) is another example of a Canadian regional health network. Both are structured as a “network of networks” containing several species-specific networks (e.g., bovine/poultry/swine networks) within the umbrella of a regional organization. The core activity of each species network within OAHN and RAIZO is a quarterly network meeting of experts, to discuss data from that animal sector collected over the previous three-month period. The composition of the experts on the network committees includes veterinary practitioners, laboratory representatives, veterinary college researchers, and provincial staff active within the sector.

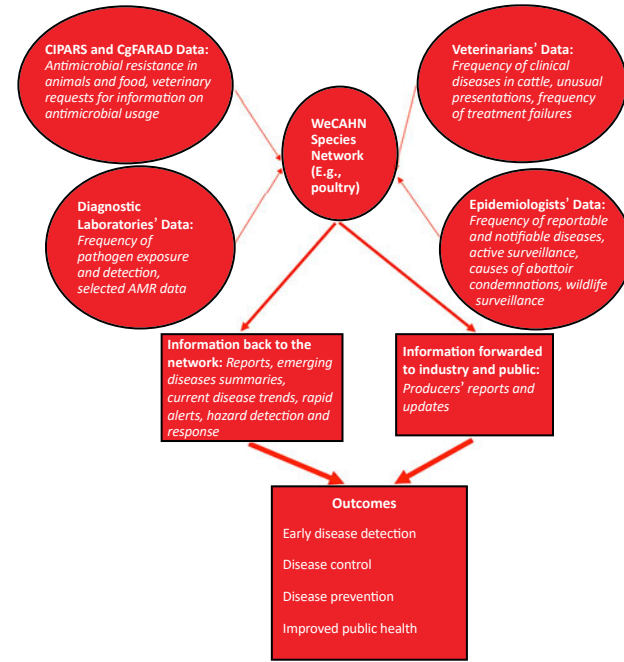
The newest Canadian regional animal health network, the Western Canadian Animal Health Network (WeCAHN), was initiated in April 2020 with the support of the chief veterinary officers of the four western provinces, with Saskatchewan as the provincial lead in securing funding, and Prairie Diagnostic Services as the organizational champion holding project funds and offering administrative support.

BEEF NETWORK ACTIVITIES

The first teleconference meeting of the WeCAHN beef network was held September 3, 2020. Participants included veterinary practitioners from each of the four western provinces, nominated by the Western Canadian Association of Bovine Practitioners; veterinary epidemiologists employed by the western provincial governments; representatives from each of the four western provincial veterinary diagnostic laboratories; faculty from both of the western veterinary colleges; and representatives from the Canadian Integrated Program for Antimicrobial Resistance Surveillance and the Canadian Cow-Calf Surveillance Network. Infographics and longer reports summarizing the meeting takeaways are available in formats for veterinarians, as well as a version for clients at pdsinc.ca/Services/WeCAHN/WeCAHNNetworkReports.aspx. Additionally, infographics showing the WeCAHN spring 2020 calf loss statistics, together with tips for improving the diagnostic yield from laboratory submissions, are also available at pdsinc.ca/Portals/0/WeCAHN_beef%20perinatal%20and%20pre-weaning%20losses_spring%202020.pdf.

POULTRY NETWORK ACTIVITIES

WeCAHN is currently seeking interested poultry veterinarians to participate in the WeCAHN poultry network. This would include completing a survey of poultry



practitioners’ clinical impressions before the quarterly network meetings, reviewing the dataset prepared for the network meeting, attending the network meetings, and reviewing the reports summarizing the meeting discussions. Interested poultry practitioners should communicate their interest to the Western Association of Poultry Veterinarians executive.

SUPPORT IN DEALING WITH SMALLHOLDER CLIENTS

WeCAHN is pleased to announce a pilot project establishing a listserv to allow non-specialist veterinary practitioners in Western Canada to ask questions of specialists in swine practice. To this end, WeCAHN has engaged the services of the swine practitioners at Prairie Swine Health Services to answer any questions regarding development of diagnostic plans for cases involving smallholder swine clients. (Work to establish a similar listserv for poultry is underway.) For further information or to request membership on the listserv, please send an email to we.cahn@pds.usask.ca.

HOW CAN WeCAHN SERVE BC VETERINARIANS?

WeCAHN offers several benefits for BC veterinarians, including:

- Reports from network meetings with takeaways for practitioners and their clients
- Other knowledge transfer materials generated by the network meetings (e.g., calf loss and abortion infographics) or describing completed work by other networks (e.g., antimicrobial use and vaccine usage captured by the Canadian Cow-Calf Surveillance Network)
- Access to the smallholder listservs as described above
- In addition to the special group listservs, WeCAHN is a place where you can send a message about “I saw something sort of unusual . . .” to improve animal disease surveillance [WCV](#)

TEAR OUT THIS PAGE IF YOU WISH TO SAVE IT.

FROM A LAWYER

BY SCOTT NICOLL, BA, MA, LLB

My last column concerned what to do if you receive a notice of complaint from your regulatory college. This article will focus on how you may prevent those complaints from arising in the first place.

It is important to understand at the outset that you may not be able to prevent a complaint ever being made against you. In your dealings with the public, remember that you can only control your actions, not those of your clients or other colleagues. Receipt of a complaint does not mean you have done anything wrong; it only means that someone else thinks you have. I reinforce this point with almost every professional client I act for when they first learn that they have become the subject of a complaint from their regulatory college. We professionals typically hold ourselves to high standards, and receiving a complaint from someone who believes that we have failed to meet those standards causes a measure of shock in most of us. Do not be surprised when that occurs. Always remember that the fact that a complaint has been made against you with your regulatory college does not mean that you are any less competent as a professional or any less worthy of the respect of your peers.

It may be that in the incident in question you should have done something differently, but the time immediately following receipt of a complaint from your College is not the time for self-recrimination. My experience is that such conclusions are extremely premature at that point. Many professionals who are the subject of a professional complaint are simply the latest victim of an unreasonable person. The complainant in your case may simply be someone with an overdeveloped sense of entitlement from service providers who takes a “no” as a personal affront. You are typically not the first but merely the latest person to run afoul of this person, and that makes you merely unlucky, not incompetent or unprofessional.

Nonetheless, there remain certain things you can do that will help you to prevent complaints. The experience of my practice has been that the majority of complaints arise from misunderstandings between the client and the professional. It is an oversimplification to describe the best practice with clients as being “communicate, communicate, and communicate some more,” but not by much. My

only slightly tongue-in-cheek advice to my clients is that unless you think you have communicated too much with your client, you have not communicated enough.

My experience is that professionals sometimes make assumptions about the client’s level of understanding and fail to ensure that the client has a thorough understanding of what is happening, and why, at each stage of the interaction. A typical scenario involves explaining the treatment plan to the client. Although you explain the treatment plan, you may fail to specifically mention some portion of the treatment that they are later surprised by, for whatever reason. Their initial reaction is not to stop and ask you to explain why you are doing something; typically, clients will simply permit you to continue, trusting in your

ability and experience.

However, sometimes they later begin to think about that portion of the treatment and become suspicious or otherwise uncomfortable about it. Then they will typically talk to someone around them about it, and not to you. Depending upon the feedback they receive from those around them,

informed only by their version of events, the matter may or may not escalate from there.

This is easily the most common scenario I have encountered in defending professionals in my practice. To avoid it, be careful to explain things as thoroughly as possible before the treatment begins, using simple language without jargon. Explain each phase of the treatment as it progresses. Tell them, and tell them again, that if at any point they are uncomfortable or do not understand any portion of the treatment, to tell you that so that you can address their concerns. Obviously, this is not always possible or appropriate, but do it when it is. When the treatment is done, ask them if they had any questions or concerns about how the treatment progressed. Note their response and your responses, if any, in your file.

A common complaint from clients of medical professionals is that the professional failed to obtain informed consent before beginning the treatment. Not surprisingly, this also happens to be a necessary element



PHOTO BY ESB PROFESSIONAL/SHUTTERSTOCK.COM

of professional negligence that gives rise to an action for damages in the court system. You will know that the elements of informed consent in your case are set out at section 211 of the bylaws of your regulatory college (portal .cvbc.ca/wp-content/uploads/2020/03/Part-4-Ethics-and-Standards.pdf). A detailed discussion of informed consent is beyond the scope of this article, but that is a section of your bylaws that you should be thoroughly familiar with. You should use the elements of informed consent set out in your bylaws as part of a checklist to review with each client before treatment begins. Yet another reason to always ask your client to confirm that you have answered all of their questions before you begin treatment is that you are required by section 211(9) of your bylaws to confirm that you have done so in your file. While the bylaws give you the option of obtaining the consent orally or in writing, my *strong* recommendation is to obtain it in writing by having the client sign a consent form. The best examples of such forms take the form of a checklist that you check off as you have discussed each element of the consent with the client and which you then have them sign confirming the same.

Always be alert to the possibility of the client withdrawing consent once the treatment has begun. If you believe at any point that the client has withdrawn informed consent to the treatment, or you believe their consent needs to be reconfirmed due to your obligation under section 211(8) of your bylaws (change in patient circumstances or services to be provided), stop what you are doing until you have reconfirmed consent wherever possible. Any nonverbal indications of withdrawal of consent should be treated just as seriously as verbal ones. Always document the fact that you re-confirmed consent in your file.

Informed consent also means making sure that the client understands the potential risks and complications of the treatment. Addressing this thoroughly is the most effective way of preventing the client being surprised by some aspect of the treatment, and surprised clients are significantly more likely to become complainants. Be thorough in your discussion of potential outcomes, potential complications, the risks associated with the recommended treatment plan, and the alternatives (see the elements set out in section 211 of the bylaws for a complete list of what needs to be discussed). Record this discussion in your file and, again, use a checklist that you have augmented with notes of your conversation with the owner. It is not possible, of course, to foresee all possible eventualities. That is not the standard to which you will be held. You will be expected, however, to have discussed all reasonably foreseeable outcomes, complications and risks, and reasonable alternatives. Using a checklist helps you remember all of the steps when hurried.

My advice is to make a record of all advice and discussion with the client in your file, to the greatest extent possible. Your file will be the most important single source of information and assistance to you in the event of a complaint. How you maintain your file—how diligent you are about making your file a complete and accurate record of your involvement with the patient—reflects upon you professionally. You may tell the College that you advised the client of something, but in the face of a denial of that by the client, your file will be a critical determining factor. Always treat it with that eventuality in mind.

Avoid breaching your professional obligations. This is trite, I know, but it is surprising how often it occurs. I have been involved in many professional complaints that have resulted from the professional voluntarily compromising their professional integrity at the request of a client, often one who was a personal friend at the time. The professional then becomes the target of a complaint from that client when the relationship later sours. Often the client has an ulterior motive for the complaint, completely unrelated to the original breach, but this is of no assistance to you in your dealings with the College. Remember that there is no infringement of your professional obligations that is harmless or insignificant, and there is no grey area when it comes to your professional obligations. Decide for yourself the value of that compromise and know that you will live with it for the

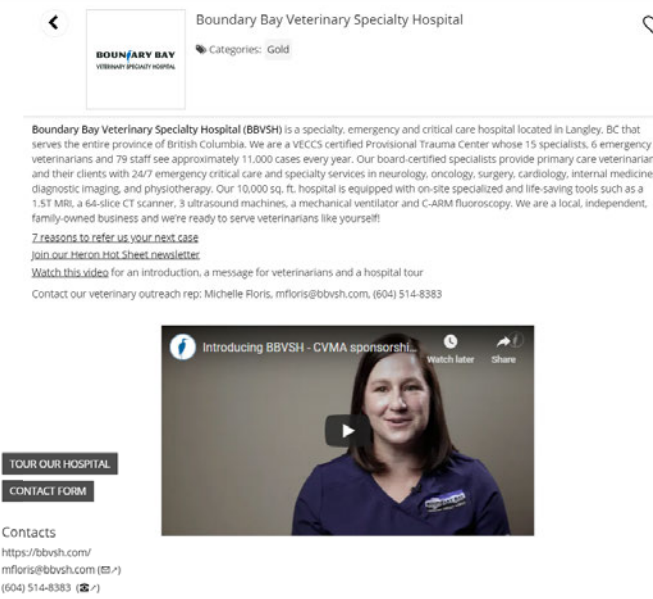
balance of your career. Some complaints cannot be avoided, but you can protect yourself by communicating as clearly, carefully, and simply as possible. Make sure you obtain informed consent as it is defined in section 211 of your bylaws. Also make sure consent is not withdrawn during the treatment, and take appropriate steps if it is. Document your communication, particularly on informed consent, in your file. The best practice is to document the informed consent in writing in your file using a checklist created for that purpose and signed by the client. Maintain your file as the valuable defensive practice tool that it is. Do not compromise your professional integrity for any reason or anyone . . . ever. If you become the subject of a complaint, do not overreact. Put on your problem-solving hat, get advice from someone you trust, and go from there. **WCV**



Scott Nicoll, BA, MA, LLB, is a member of the Law Society of British Columbia and a partner at Panorama Legal LLP. He acts for professionals, including defending professionals who are the subject of complaints to their professional colleges.

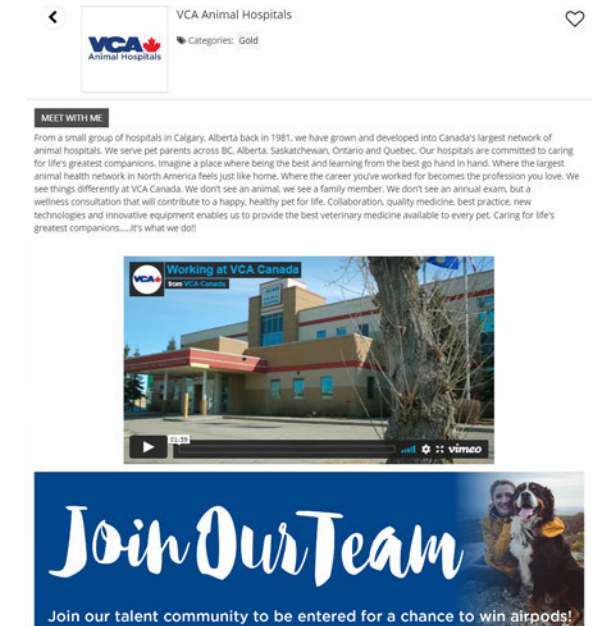
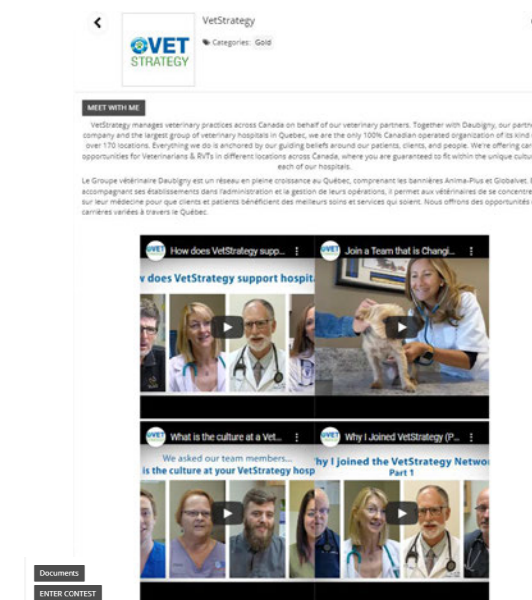
“MY EXPERIENCE IS THAT PROFESSIONALS SOMETIMES MAKE ASSUMPTIONS ABOUT THE CLIENT’S LEVEL OF UNDERSTANDING ...”

TEAR OUT THIS PAGE IF YOU WISH TO SAVE IT.



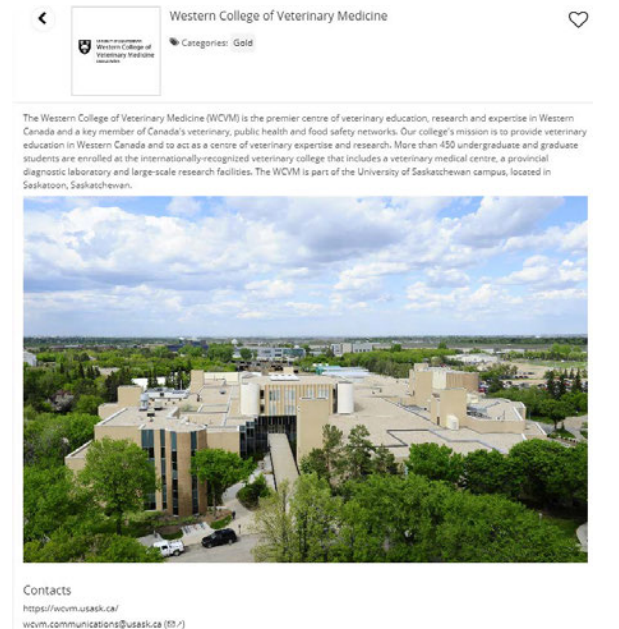
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DANGEROUS DOGS

BY KATHRYN WELSMAN, DVM

Ponder this scenario: two police officers show up at your clinic and request that you euthanize a dog who has just killed a person. What do you do? What if you were asked to attend such a case off-site from your clinic? What if an owner showed up with this dog?

We've all dealt with aggressive or reactive dogs; it kind of comes with the territory of being veterinarians. But how many of us have been presented with a dog who just killed a human? The *Canadian Veterinary Journal* published a review in 2008 tracking fatal dog attacks in Canada, and it appears there are about one or two a year across the country.¹ In British Columbia there have been three in the past 20 years, one of which happened earlier this year. So the situation is rare, thankfully, but it does happen.

Are you still thinking about the scenario? Did you have a knee-jerk reaction as to what you would do? Do you know the legalities of dangerous dog legislation in the province?

I posed this scenario to a veterinary Facebook group that I belong to and gave the veterinarians four options: a) gently recommending euthanasia, b) pushing heavily for euthanasia, c) referring the matter to bylaw enforcement, or d) recommend training and management. Most of the respondents said B or C, which didn't come as surprise to me as I would lean toward euthanasia absolutely.

The City of Vancouver's charter bylaws on dangerous dogs are very similar to the regulations in the Community Charter that governs most of BC. These documents define a dangerous dog as one that "(a) has killed or seriously injured a person, (b) has killed or seriously injured a domestic animal, while in a public place or while on private property, other than property owned or occupied by the person responsible for the dog, or (c) an animal control officer has reasonable grounds to believe is likely to kill or seriously injure a person." So in our hypothetical scenario, this dog would be classified as a "dangerous dog" across most, if not all, of BC.

The Community Charter goes on to say that "an animal control officer may seize a dog if the officer believes on reasonable grounds that the animal is a dangerous dog." In our situation, that would mean that since the dog would fit into the category of a "dangerous dog," your local animal control or bylaw departments would be the responsible party for you to contact if the dog were brought in by someone other than the owner. In other words, the police officers who brought you the dog wouldn't have the legal authority to ask you to euthanize the dog, assuming that it was no longer a danger to society. So you would need to establish a relationship and obtain informed consent with the owners, as we always do before euthanasia.

If an owner didn't consent to euthanasia or didn't request euthanasia, then the animal would be put into the court system and a judge would determine the outcome as specified in the Community Charter, which states, "If an animal control officer has reasonable grounds to believe that a dog is a dangerous dog, the officer may apply to the Provincial Court for an order that the dog be destroyed in the manner specified in the order." If the judge decides an animal will not be euthanized, most municipalities have bylaws about how they must be contained and whether they are even allowed to live in that city or town. There can also be legal ramifications for owners of a dog that re-offends—civil or potentially criminal. We aren't lawyers, but certainly when presented with a family and a dangerous dog, if we understand the spectrum of outcomes for the dog, we can help the family navigate all the options. If you have any doubt about your authority or that of the person bringing you such a case, I recommend contacting a lawyer or a bylaw enforcement officer.

PHOTO BY ANNA KRIVITSKAYA/SHUTTERSTOCK.COM

“...THE OFFICER MAY APPLY TO THE PROVINCIAL COURT FOR AN ORDER THAT THE DOG BE DESTROYED IN THE MANNER SPECIFIED IN THE ORDER.”

Several organizations of note to us have statements about dangerous dog legislation. The BCSPCA states that they recognize “that inappropriate aggression by dogs against people and other animals is a serious threat to public safety, and that this issue must be addressed if we are to create humane societies where humans and dogs co-exist and enrich each other’s lives.” The BCSPCA goes on to say that it “opposes breed banning as a strategy for addressing incidents of aggression and reducing dog bites. Rather, the Society believes that the most effective way to address public safety concerns is for humane organizations, other animal stakeholder organizations, municipalities and the provincial government to work together on multi-faceted strategies that identify and address dangerous dogs of all breeds.”

The CVMA has a statement that says, “The CVMA supports dangerous dog legislation provided that it is not discriminatory of a specific breed. This legislation should be directed at fostering the safety and protection of the general public from dogs classified as ‘dangerous’ or ‘vicious.’ The CVMA encourages and supports a community approach to dog bite prevention, including responsible breeding, training, pet selection and pet

ownership as well as education on animals in the community.” The CVMA goes on to provide some points to consider that might be relevant to a veterinarian having a conversation with an owner about aggression, outlined in the sidebar. Although these two statements have no legal force, they provide some framework for us as veterinarians to consider.

Another document to consider is the British Columbia Wildlife Act, which also has some areas that could be included in this discussion. It states that a conservation officer may “kill an animal, other than a domestic animal, that is at large and is likely to harm persons, property, wildlife or wildlife habitat. An officer may kill a dog that is at large in a wildlife management area, or at large and harassing wildlife.” I’m just speculating, but in theory a conservation officer could request your assistance in the event a dog needs to be euthanized for the above-mentioned situation. Personally, in this situation I’d still want owner consent, but that might be up to the lawyers again.

We could also rewind my hypothetical scenario to the scene of the crime, so to speak, when the dog was still at large and could still be considered a threat to public safety. When public safety is at risk, that is where law enforcement plays a role, and they might have to shoot a dog who is a threat. In my experience, no police officer who has had to discharge their firearm at a dog wanted to do so, but they felt that their life, or that of another person, was in imminent danger. If you were called to euthanize a dog on the scene, the same rules would apply as if they had been brought to your clinic. If the

dog was no longer a threat, then you as a veterinarian would need to obtain consent from the legal owner or refer the matter to bylaw enforcement. A police agency cannot tell you to euthanize a dog who is safely restrained. If the dog is still at large, then you as a veterinarian would need to assess your own safety and what your role could be in that situation and take direction from law enforcement.

Let’s say at the request of the owner, you do opt to euthanize a dog who has killed someone. You may also want to speak to the coroner investigating the case to ask whether they require any information about the dog or their medical history. You can also offer to send the dog to the provincial pathology lab for a necropsy and a forensic examination. Rabies testing might also be requested depending on human exposure during and after the attack.

Another factor to consider is your mental health while helping the owners make a decision after a very traumatic event. I posed this similar scenario to a veterinary counsellor but added a twist: in my scenario, the veterinarian had to enter the house to assess the dog, thus witnessing some gruesome scenes. She wrote back, “The veterinarian just participated (on the good-guy team) in a particularly gruesome crime event, and I encourage you to process your experience with colleagues and/or a therapist. These experiences can create little scars on our psyche, building over time to make our jobs harder. . . We call these experiences ‘vicarious trauma’ as we are not actually being injured—but our psyche/our soul/our spirit can be traumatized and that trauma can travel with us if we don’t allow ourselves to process it. We call this build up of events ‘compassion fatigue’ and CF can be recognized, treated, and prevented.”

She went on to explain that “those of us . . . who experience vicarious trauma can avoid being scarred by our experiences by following a few simple steps. These steps can be helpful for just about every bad thing we experience.” The steps she outlined were:

- Talk through the experience in a safe environment
- Start your story by relaxing your body physically
- Allow yourself to describe the emotions that came up during the event
- When flashes of the event come up, actively relax your body and remind yourself that it is normal and OK to be upset by the aspects that trouble you
- Remind your body that you are safe
- Finally, if you have a therapist, a therapeutic environment is a wonderful place to process this kind of emotional trauma

This kind of situational detox can be cultivated in your team for lots of psychological trauma (that nasty client experience, that scary cat that almost got you, that case that isn’t going the right direction). Creating a culture where people can safely vent and debrief with each other is a great thing to cultivate in all of our work and personal life settings.

Luckily, most of us will never be faced with this situation. However, I do worry because I think we see more and more reactive and aggressive dogs in the clinic that the owners have no idea how to handle—nor do they seem to want to help their dog, making many excuses about their behaviour. So even if most of the information in this article seems irrelevant to you on an everyday basis, being aware of the spectrum of ramifications of when a dog kills someone hopefully can give you more talking points when you discuss behavioural issues with your clients. I’m sure you all do it, but if in doubt, refer your patients to a veterinary behaviourist. [WCV](#)

¹Malathi Raghavan, “Fatal Dog Attacks in Canada,” *Canadian Veterinary Journal* 49, no. 6 (June 2008): 577–581.

CVMA’S POSITION STATEMENT ON LEGISLATION CONCERNING DANGEROUS DOGS—BACKGROUND

From the CVMA website:

<https://www.canadianveterinarians.net/news-events/news/legislation-concerning-dangerous-dogs-position-statement>.

1. Aggression is a normal behaviour expressed by most species of vertebrates as well as some invertebrates, and evolved to increase an individual’s opportunity for survival, resources and reproduction.
2. Aggression from any animal with potential to cause harm and living in close proximity to humans and other animals poses inherent risks to public and community health.
3. A number of factors contribute to the risk and severity of dog bite incidents including:
 - 3.1. Human factors such as young children at higher risk of serious injury; lack of supervision of children and dogs; increased risk of bite from a familiar dog; type of interaction (e.g. running or chasing); lack of knowledge of dog behaviour and communication.
 - 3.2. Animal factors such as the size of the dog; temperament of the dog; physical health (presence of painful conditions); gender and/or reproductive status; training and socialization;

3.3. Environment factors such: level of enforcement of dog control; tethering of dog; geographic location; population density; level of reporting of dog bites; cultural factors (e.g. dogs living as community pets).

4. Many dog aggressive incidents and therefore dog bite injuries could be prevented by increased effort to educate the community as a whole on dog bite prevention, responsible dog ownership, breeding, training and behaviour.

4.1. Dogs may show aggression that can be either appropriate or inappropriate. Appropriate aggression is a normal behaviour where an animal exhibits aggression that is in context with the degree of danger or threat to the dog. Dogs that show appropriate aggressive behaviour will exhibit a complete behavioural sequence or patterned response to environmental circumstance which includes in the following order:

- 4.1.1. “Calming” signs including but not limited to: lip licking; looking away from threat; blinking; turning head and/or body away from threat; tail tuck and/or body tuck; yawning; moving slowly;
- 4.1.2. Increasingly overt warning signals such as growling, lip lifting, and/or barking;
- 4.1.3. A pause to observe the other individual’s response;

4.1.4. Action (snap or bite only if the dog has interpreted the situation/person as dangerous), and release.

If the dog does not interpret the situation/person as dangerous, or is reassured or is “in agreement” with the individual’s response to the warning, it could choose to end the aggressive sequence after the warning without further action.

5. The meaning of “dangerous” as used in legislation can vary among jurisdictions however it usually refers to the risk of harm by any action of the dog, whether or not benign, such as biting, jumping, slamming against, grabbing, swiping with its paws, and over-friendliness that is expressed as jumping upon. For example, a dog that has the habit of running to a person and jumping enthusiastically upon [them] could be considered by some jurisdictions to be dangerous because of the risk of harm to an elderly pedestrian.

6. A “vicious” dog is classified as any dog that is inappropriately aggressive and when unprovoked, bites or attacks a human or another animal, either on public or private property. Dogs that show inappropriate aggressive behaviour will have an altered behaviour sequence (no warning prior to the bite; no release of the bite; warning and bite without a pause between the two events, etc.).

Other indications of inappropriate aggressive behaviour are:

- 6.1. The aggressive behaviour cannot be justified or explained given the circumstances (inappropriate for the context, for example, not related to perceived fear, threat, self-defence or because of pain or threat to the animal);
- 6.2. The frequency of aggressive events is excessive for the context;
- 6.3. The severity of the bite is excessive for the context.
7. Municipalities and/or provinces may have various forms of “restricted,” “dangerous,” “vicious,” or “breed-specific” dog legislation.
8. The CVMA recommends that municipal and provincial governments that are considering vicious dog legislation consult the model municipal bylaws proposed by the National Companion Animal Coalition.
9. The CVMA recommends that dogs determined to be dangerous or vicious by a jurisdiction receive a complete physical and behavioural assessment by a veterinarian before euthanasia or other options are considered.

This issue's specialist column on congenital cardiac disease is broken into two parts. This instalment discusses surgical interventions for some of the more common conditions, and the second, which will appear in the spring 2021 issue, will focus on pacemakers.

INTERVENTIONS FOR CONGENITAL CARDIAC DISEASE

BY MARK HARMON, DVM, Dipl. ACVIM (Cardiology)

Bea, a 16-week-old female Landseer Newfoundland, was presented to a veterinarian as part of a litter examination before being sold. Out of six puppies, murmurs were detected in three, including Bea. Murmurs were described as being at the left heart base, grade 3 or higher, suggesting that they were indicative of congenital cardiac disease. Bea's veterinarian performed thoracic radiographs, revealing marked cardiac enlargement and possible early left-sided congestive heart failure. The three affected puppies were promptly referred to a cardiologist, at which time Bea was diagnosed with a patent ductus arteriosus (PDA) and severe subaortic stenosis (SAS). One of the other puppies had mild pulmonary valve stenosis, which was not felt to be an issue that would affect the dog's quality of life or longevity; however, the third puppy was diagnosed with a PDA and severe pulmonic stenosis. Bea and her other severely affected littermate had guarded long-term prognoses, and the breeders indicated that they might consider euthanasia for these puppies.

PHOTOS COURTESY MARK HARMON

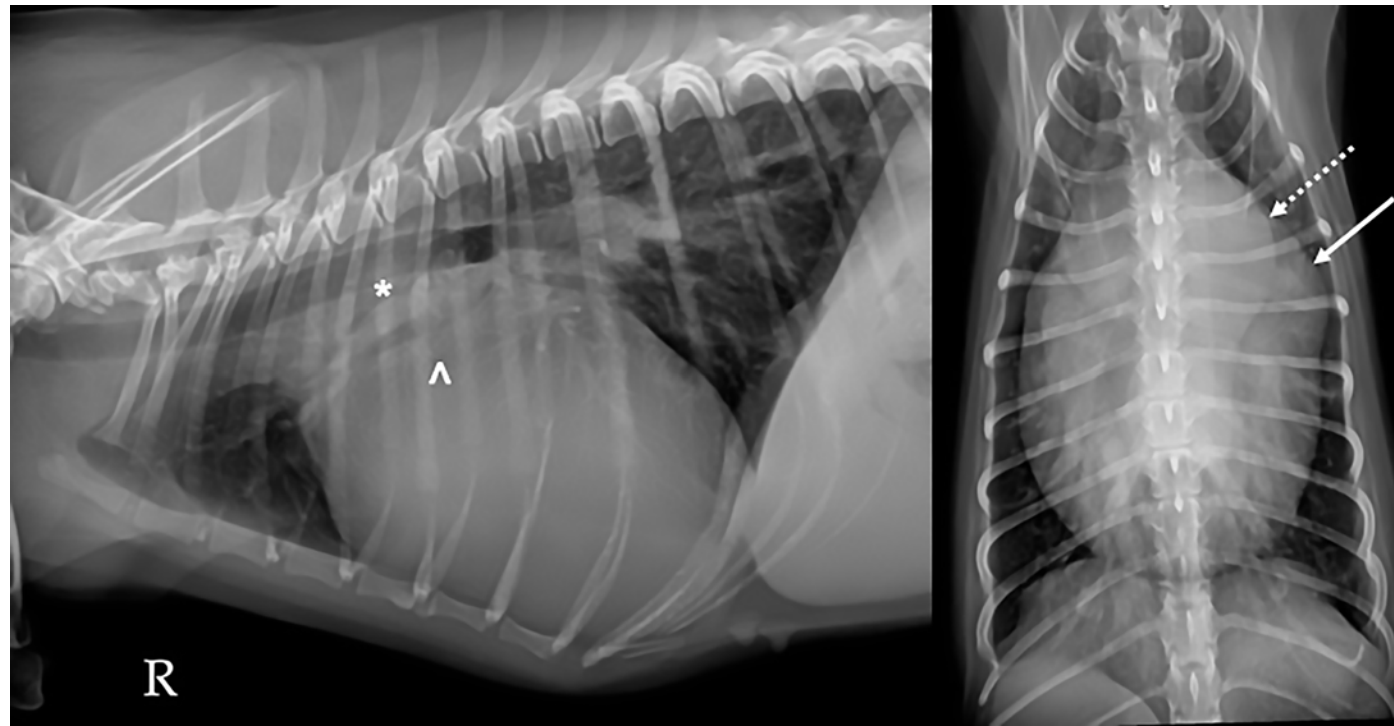


FIGURE 1: Right lateral and VD thoracic radiographs from a dog with a PDA. The cardiac silhouette is markedly enlarged with predominantly left-sided enlargement. On the VD projection, there is dilation of the pulmonary artery (dashed arrow) and left auricle (solid arrow). The pulmonary arteries (*) and veins (^) are both dilated. There is a hypervascular lung pattern, but no evidence of congestive heart failure.

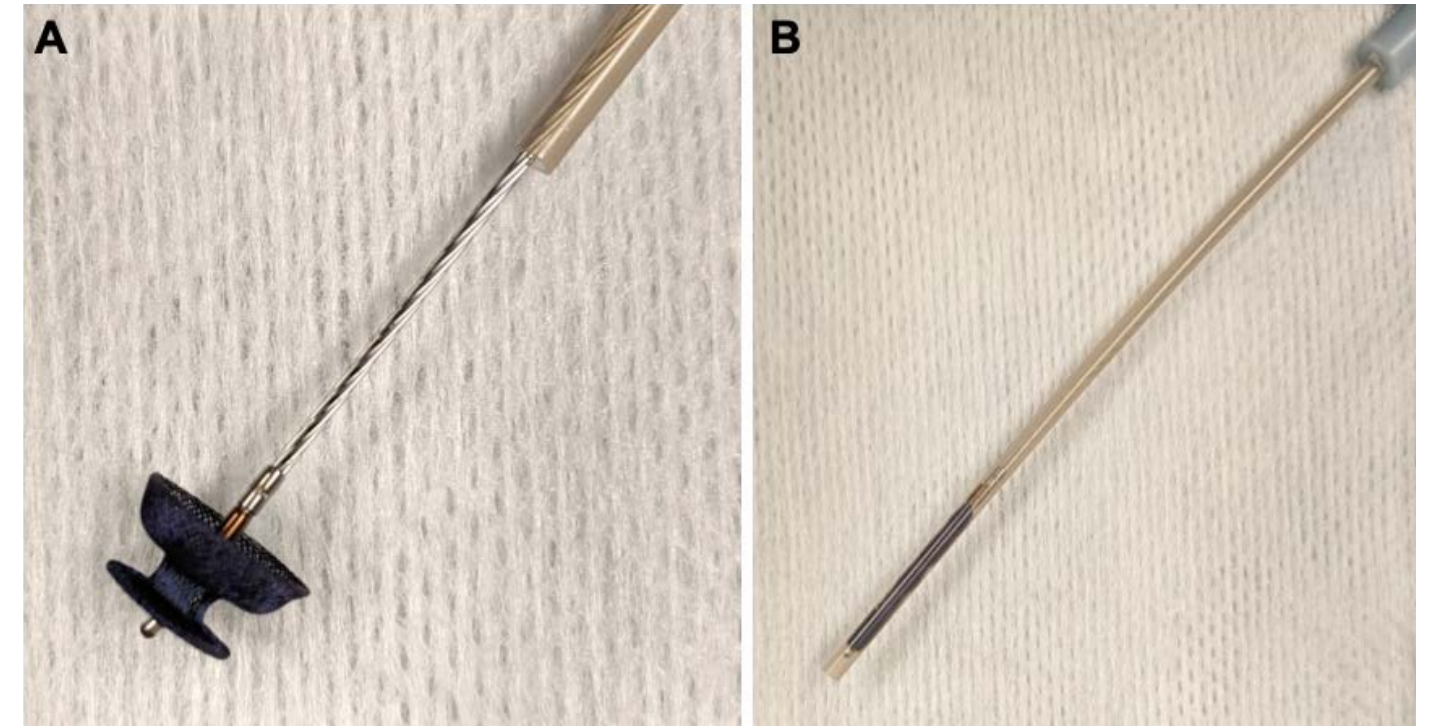


FIGURE 2: An Amplatz canine ductal occluder (ACDO). The ACDO is a nitinol mesh that consists of a flat distal disc that sits in the pulmonary artery and a proximal cup that sits in the ductus (A). The device can be constrained into a catheter for minimally invasive deployment (B).

My wife was a veterinary student in the cardiology rotation when the puppies came in. Knowing that Bea might have a guarded prognosis and might only live a couple of years, my wife told the breeders that we would take Bea, who we renamed Juneau. The cardiologist repaired Juneau's PDA with a minimally invasive procedure that was relatively novel at the time. Correcting her PDA had the effect of also markedly reducing the volume in her left ventricle, which reduced her SAS severity from severe to mild. Her heart failure also immediately resolved.

Juneau lived with us for 10 years, through the remainder of veterinary school, internships, residencies, and early life as specialists. And she is one of the major reasons that I decided to become a cardiologist. The quick action of the initial veterinarian who examined her was crucial in ensuring that she had such a long, healthy life.

Congenital cardiac disease in dogs was historically treated with invasive thoracotomies and open-heart surgeries that entailed major risks. These are still needed in select situations, but there have been major advancements over the past 10 to 15 years in minimally invasive catheter-based procedures to address these issues, called interventional cardiology. In this article, I will discuss two of the most common congenital abnormalities in dogs and the current interventional approaches we take for these conditions.

PDA's

The ductus arteriosus (DA) is a normal fetal connection between the aorta and pulmonary artery that allows blood to bypass the non-inflated lungs. At birth, lung expansion leads to a rapid drop in the resistance to pulmonary blood flow and catabolism of placental prostaglandins. The combination of these events leads to vasoconstriction of the smooth muscle within the DA. Functional closure of

the DA generally occurs within hours of birth, with complete closure within a few days.

In dogs, a lack of smooth muscle within the ductus arteriosus can lead to abnormal patency into post-natal life, called a patent ductus arteriosus (PDA). Since systemic pressures (approximately 120/80 mmHg) are much higher than pulmonary pressures (approximately 25/10 mmHg), this results in shunting of blood from the high-pressure aorta to the low-pressure pulmonary artery (i.e., left to right). The shunted blood is sent through the lungs and back to the left heart chambers. This can result in left-sided volume overload.

PDA's are one of the three most common congenital cardiac defects in dogs, accounting for roughly 30 per cent of congenital cardiac diseases. Females are roughly three times as likely to have PDA's as males. Breed predispositions include: Miniature Poodles, Maltese, Bichon Frise, Newfoundlands, and German Shepherds, although any breed can have a PDA. PDA is a hereditary condition; as such, affected dogs should not be bred.

Auscultation high in the left axilla reveals a continuous murmur because the pressure in the aorta is higher than the pulmonary artery in both systole and diastole. The persistent runoff of blood across the ductus during diastole leads to a drop in the diastolic systemic blood pressure, leading to hyperkinetic or "bounding" femoral pulses. Most dogs are asymptomatic at the time of diagnosis; however, if a PDA is detected later, signs of congestive heart failure may be present. Early detection before development of clinical signs is key to ensuring the best prognosis for these patients. By the time a puppy is presented for its first wellness exam, a continuous murmur should not be present. If present, this should prompt referral for cardiac evaluation.

The left-to-right shunt creates a volume overload of the left heart chambers. Over time, this can lead to development of congestive heart failure. Thoracic radiographs can show marked cardiomegaly predominated by left-sided enlargement (Figure 1). On the VD projection, a classic "triple bubble" appearance has been described, with three dilations in the one, two, and three o'clock regions that correspond to aortic enlargement, pulmonary artery enlargement, and left auricular enlargement, respectively. Pulmonary arteries and veins may both be dilated due to pulmonary overcirculation. The pulmonary parenchyma can be challenging to interpret due to a hypervascular

lung pattern that can look like early pulmonary edema. More advanced edema will cause interstitial-to-alveolar pulmonary infiltrates, often worst in the perihilar region with extension into the caudodorsal lung fields.

Without treatment, approximately 65 per cent of dogs will develop signs of congestive heart failure within the first year of life, with the remaining dogs developing heart failure as juveniles or young adults. It is uncommon for a dog with a PDA to not eventually develop congestive heart failure. Supraventricular (e.g., atrial fibrillation) and ventricular arrhythmias can also result from marked chamber enlargement. Given these risks, correction is recommended almost universally for dogs with left-to-right PDA's. Rarely, dogs may develop severe pulmonary hypertension such that the shunt reverses (i.e., from pulmonary artery to aorta, or right to left), and the murmur disappears. Shunt reversal generally occurs in dogs before six months of age. Surgical correction is not recommended if this occurs, as occlusion of the PDA in this situation generally leads to fulminant right heart failure signs due to the severe pulmonary hypertension.

Historically, dogs with PDA's required a thoracotomy to ligate the vessel; however, over the last several years transcatheter deployment of an occlusion device has become the preferred method in most cases. The most common device used is called an Amplatz canine ductal occluder (ACDO) (Figure 2). The smallest ACDO requires at least a 4 Fr delivery catheter to be fitted into the femoral artery. For this reason, there is a lower weight limit for performing this procedure: generally around 3 kg. Less commonly used occlusion devices such as coils or vascular plugs may be usable in dogs weighing less than 3 kg for minimally invasive closure. A traditional thoracotomy could also be performed in these dogs; however, tearing of the ductus during ligation could be fatal.

For transcatheter occlusion of a PDA, a cut-down is performed in the inguinal region to access the femoral artery. Similar to placement of a central (jugular) venous catheter, a modified Seldinger technique is used to facilitate placement of a long introducer. Under fluoroscopic guidance, the introducer is advanced through the descending aorta until it reaches the juncture between the transverse and descending aorta. Angiography is performed via injection of radiopaque contrast, which not only delineates the position and morphology of the PDA, but also allows confirmative measurements used for

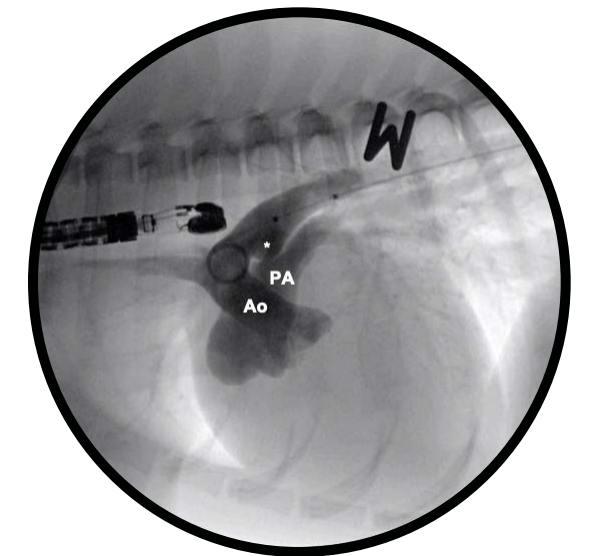


FIGURE 3: Aortic angiogram in a dog with a patent ductus arteriosus. A pigtail angiographic catheter with radiopaque markers (for measurement calibration) has been advanced through the descending aorta with the pigtail sitting in the aortic arch (Ao). Contrast injection reveals a left-to-right shunting patent ductus arteriosus (*) with subsequent opacification of the main pulmonary artery (PA). A transesophageal echocardiographic probe is also visible.

device sizing (Figure 3). A guide wire is subsequently fed through the introducer and across the ductus into the main pulmonary artery, and the introducer is then tracked into the same position. The ACDO is then deployed through the introducer to occlude the PDA. A second angiogram is performed through the introducer to confirm occlusion

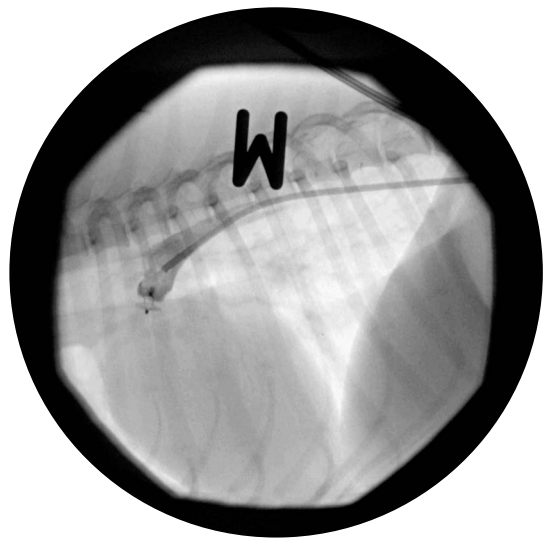


FIGURE 4: Aortic angiogram several minutes after deployment of an ACDO. The contrast extends to the proximal cup of the ACDO but does not cross into the pulmonary artery, indicating complete occlusion of the PDA.

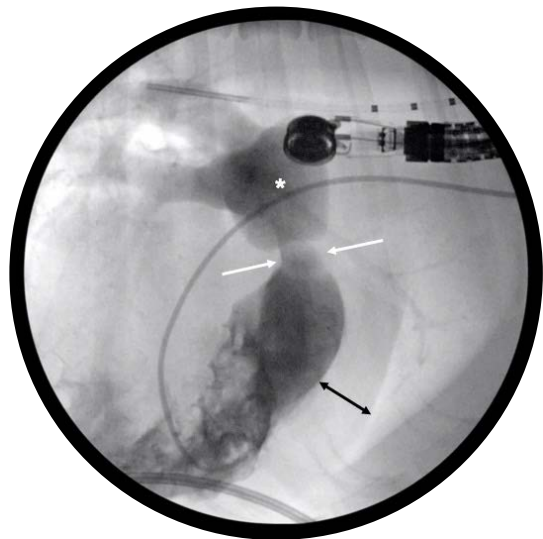


FIGURE 5: Right ventricular angiogram in a dog with pulmonary valve stenosis. Orientation is such that the patient's head is to the right to coincide with the surgeon's approach. A pigtail angiographic catheter has been advanced through the jugular vein, cranial vena cava, and right atrium with the pigtail resting in the right ventricular outflow tract. Contrast injection reveals a discrete narrowing at the level of the pulmonic valve (white arrows) with post-stenotic dilation of the main pulmonary artery and extending into the branch pulmonary arteries (*). Severe right ventricular hypertrophy is also evident (black arrow). A transesophageal echocardiographic probe and marker catheter (for measurement calibration) are also visible.

of the ductus (Figure 4). Once this is confirmed, the ACDO can be unscrewed from the delivery wire. All catheters are then removed, and the femoral artery is ligated before closure.

Complications of transcatheter PDA occlusion are uncommon, but can include bleeding, dislodgement of the device, and infection. If the device dislodges and travels into the peripheral lungs, animals may show no clinical signs aside from recurrence of the heart murmur and potentially heart failure if those signs were present preoperatively. Systemic embolization of the device is a surgical emergency to restore blood flow. Infection can be particularly catastrophic as there is no feasible way to remove the device from the ductus.

Barring complications, prognosis is excellent in dogs undergoing transcatheter PDA occlusion. Dogs with no prior history of congestive heart failure are expected to live a normal life, emphasizing the importance of early referral and intervention in these cases. Dogs with a history of heart failure can often still have a good prognosis if correction can be performed shortly after diagnosis, with many dogs being weaned off cardiac medications.

BALLOON VALVULOPLASTY

Pulmonic stenosis (PS) is also one of the most common congenital cardiac diseases in dogs with a frequency similar to PDAs. A range of lesions have been described with this condition, including leaflet fusion, dysplastic thickened leaflets, and hypoplasia of the pulmonic valve annulus. Bulldog breeds may also have an aberrant left coronary artery that wraps around the pulmonic valve region and causes extramural compression. PS creates a pressure overload in the right ventricle leading to thickening of the right ventricular walls. This can lead to development of arrhythmias and right-sided congestive heart failure. Because the arrhythmias tend to originate in the ventricles, sudden death is possible. Dogs with PS are often asymptomatic as puppies but can go on to develop signs such as activity intolerance or exertional syncope at any point in adulthood.

Early identification of PS is important, but may be challenging. Heart murmurs associated with PS are best heard in the left base region, and softer murmurs can be difficult to distinguish from innocent puppy murmurs. Innocent puppy murmurs are generally grade 3 or lower intensity, systolic, dissipate at each visit, and are usually gone by the age of 16 weeks of age. A murmur with greater than grade 3 intensity, increasing in intensity, in an unusual location, or with a diastolic or continuous component is never normal and always warrants further evaluation. Other physical examination abnormalities in dogs with PS could include arrhythmias or signs of right-sided congestion, such as jugular venous distension, hepatomegaly, and ascites.

Symptomatic patients should have routine lab work and thoracic radiographs performed. Definitive diagnosis is obtained from an echocardiogram, which also helps to quantify the severity of the stenosis. In addition to diagnosis of PS, the goal of the echocardiogram is to identify any other congenital cardiac abnormalities, quantify right-sided enlargement, and obtain precise views of the valve, annulus, and the amount of room available for a balloon to fit. Aberrant coronary arteries in bulldogs can generally not be excluded via the echocardiogram, but can be evaluated with either thoracic CT or an aortic root angiogram at the time of surgery.

Patients with mild PS generally do not require any therapy and are expected to live normal lives. Patients with severe PS are at the highest risk for developing complications of the disease, and generally require therapy. Patients with moderate PS have mixed outcomes, and treatment is based upon the presence of clinical signs, severity of the disease, presence of other cardiac abnormalities, and morphologic valve changes that may help predict procedural success. PS dogs with concurrent tricuspid valve dysplasia generally require treatment. Dogs that have a combination of PS and a ventricular septal defect (VSD) may not be treated if the PS is decreasing the shunting across the VSD.

Beta blockers (e.g., atenolol) are often prescribed for moderate and severe PS cases. By decreasing the force of contraction and heart rate, they help to lessen the degree of obstruction and decrease the myocardial demand for oxygen. They are also antiarrhythmic for both supraventricular and ventricular tachyarrhythmias. I usually aim for a target dose of 1 mg/kg PO BID for atenolol, but will slowly up-titrate to this dose over one to three weeks.

Balloon valvuloplasty has been shown to improve clinical signs and improve survival in dogs with PS, and has therefore become the preferred surgical treatment. This is a minimally invasive procedure performed from either the jugular vein or the femoral

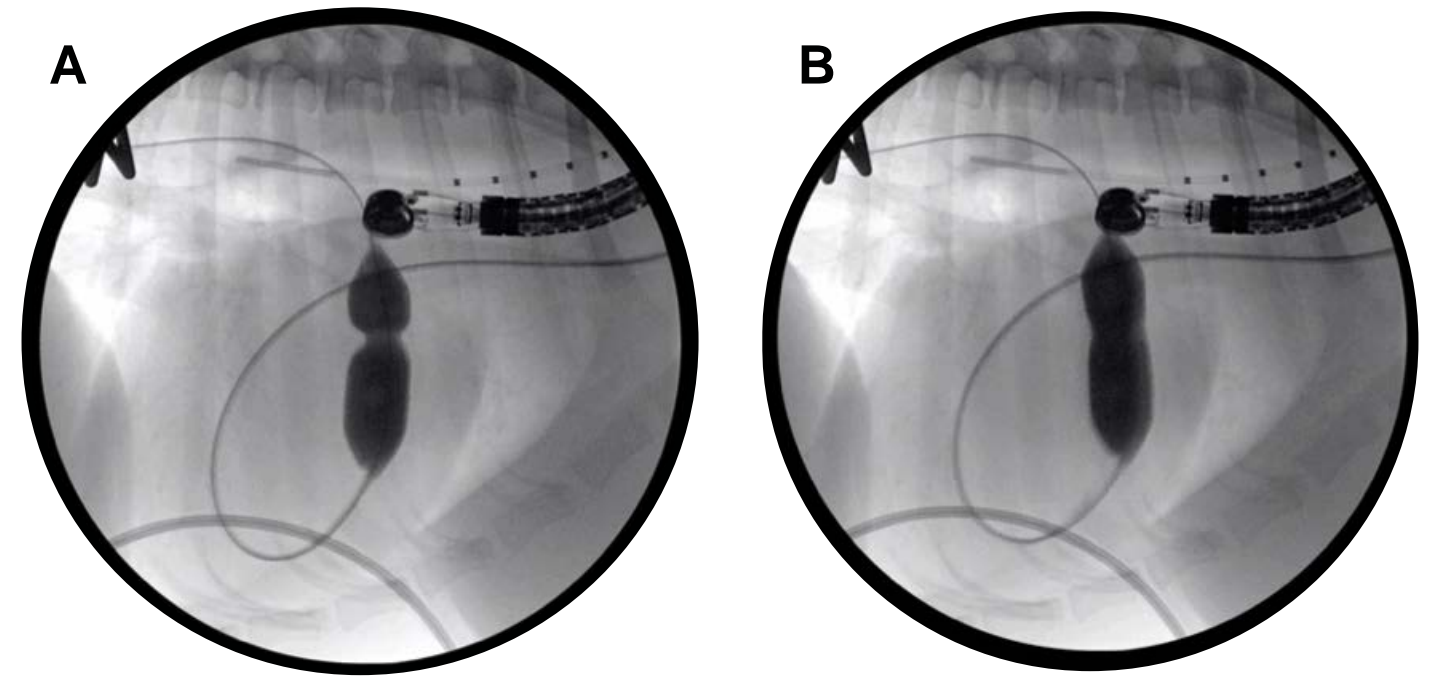


FIGURE 6: Serial images during balloon inflation for pulmonary valve stenosis. In both images, the patient's head is to the right so as to be oriented with the surgeon's approach. A guide wire has been fed from the jugular vein through the right heart and distally in the pulmonary artery so as to allow placement of a balloon catheter in the right ventricular outflow tract. A: Initial inflation reveals a discrete waist at the site of pulmonic valve stenosis. B: Continued inflation results in an abrupt loss of the balloon waist as the pulmonic valve leaflets tear open.

vein, sometimes being performed percutaneously without the need for any incision. First, a vascular introducer is placed into the vein. An angiographic catheter is advanced into the right ventricle under fluoroscopic guidance, and contrast injection helps to delineate the stenosis and confirm annulus measurements obtained from the echocardiogram (Figure 5). If an aberrant coronary artery is identified on the angiogram, the procedure is either aborted or a more conservative ballooning is performed. A guide wire is then fed into the distal pulmonary artery and used to facilitate placement of an inflatable balloon in the right ventricular outflow tract. On initial inflation, a discrete waist will initially be seen and with continued inflation, the goal is to have this waist abruptly disappear, indicating tearing of the valve leaflets (Figure 6). On subsequent inflations, a waist will not be present if this has occurred.

Complications of balloon valvuloplasty include damage of other cardiac structures such as the tricuspid valve or perforating a heart chamber. Ventricular arrhythmias can be very frequent during the procedure and lead to ventricular fibrillation if not treated or not

responding to treatment intraoperatively. These almost invariably subside once catheters are removed from the heart. With inflation of the balloon, it is not uncommon to damage the right bundle branch, creating a right bundle branch block (Figure 7). This may be transient or even heart rate-dependent, although it is not generally of any significant concern. If permanent, it is important to know that future ECGs performed for anesthesia may look unusual.

The general goal of balloon valvuloplasty is to reduce the pressure gradient by as much as safely possible while minimizing damage to any other cardiac structures. Published definitions of procedure success include a 50 per cent reduction in PS severity, or reduction out of the severe category of PS. Procedural success rates are 80 per cent to 90 per cent in the literature, but it is important that the procedure be performed before development of major complications to ensure the best prognosis. Arrhythmias present before surgery may be irreversible, and although reduction may help the animal in right-sided congestive heart failure, some degree of medical management may be required beyond surgery. [WCV](#)

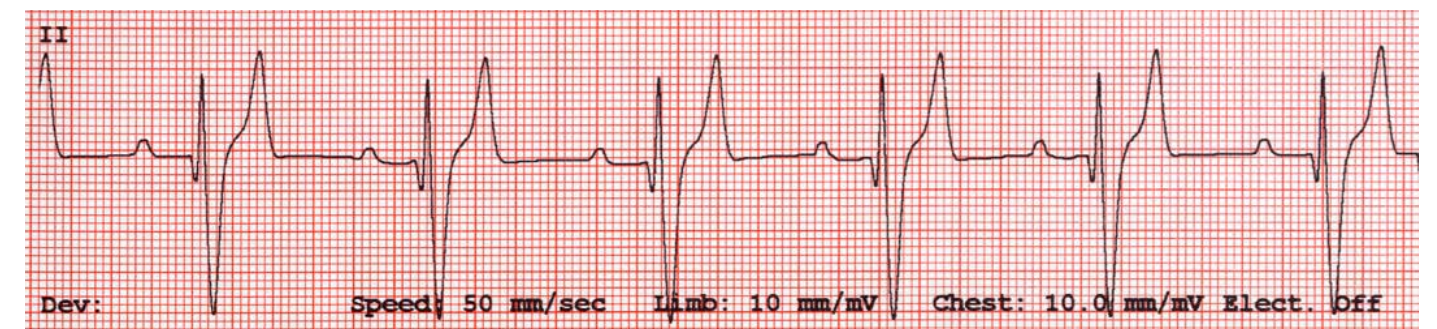


FIGURE 7: Lead II ECG from a dog post-balloon valvuloplasty. The P waves are normal in appearance with a set relationship to the subsequent QRS complexes, indicating a sinus rhythm. The QRS complex is widened and predominantly negative due to the presence of a deep S wave. These changes indicate ventricular conduction is occurring with a right bundle branch block, a common finding after balloon valvuloplasty that may be transient or permanent.

UBC LAUNCHES A STUDY ON ANTINEOPLASTIC DRUG EXPOSURE RISK IN BC VETERINARY PRACTICES

BY HUGH DAVIES, BSc, MSc, PhD, CIH, AND FIONA SENYK, BA



PHOTO COURTESY FIONA SENYK

As companion pets live longer, they are at increased risk of developing cancers, which are often treated with antineoplastic (chemotherapeutic) drugs. These drugs are beneficial for treating disease; however, they present a potential occupational health hazard for veterinary workers in contact with the drugs. Long-term exposures to these drugs are associated with adverse health effects in humans, particularly on the reproductive system. More research is needed to characterize exposure to antineoplastics, particularly in veterinary settings.

Many studies have been done in human health care settings about how health care workers may be exposed to antineoplastic drugs. It has been found that exposure levels are affected by various determinants, such as types of control measures, personal protective equipment, and training.¹ Studies also found that exposures to antineoplastic drugs present a potentially serious occupational health risk to health care workers such as nurses, pharmacists, and pharmacy technicians, and to some people in related occupations, such as cleaning staff. However, little is known about how such

exposures may affect staff in veterinary practices, or what protections are in place across different veterinary care settings where antineoplastic drugs are used.

In veterinary settings, exposure may occur through handling contaminated equipment (such as contaminated drug vials and packaging), compounding or administering drugs, handling soiled bedding or clothing, or touching contaminated surfaces such as counters and equipment. It is unclear how the findings in human health care settings compare to veterinary settings with their varying practices and protocols. More research is needed about the factors that may increase or decrease the likelihood for contamination,² such as how exposure differs between small clinics and large specialty clinics, as well as how biosafety cabinets or closed system transfer devices are used to prevent drug exposure. A better understanding of what drugs are used, staff training and experience, personal protective equipment use, and safety protocols is needed so that knowledge can be generated to address any potentially serious health exposures in the workplace.

For these reasons, a research project is being conducted at the University of British Columbia to characterize antineoplastic drug use in BC and Minnesota veterinary practices.

The project seeks to achieve two main objectives:

- 1) Study antineoplastic drug use in BC and Minnesota veterinary practice, including drug administration and handling practices, current levels of safety controls, and current levels of education and training for handling antineoplastic drugs.
- 2) Study antineoplastic drug contamination on various surfaces, examining which drugs are found, where they are found, drug concentrations, and which types of surface materials are contaminated.

We ask for the participation of your veterinary practice.

We are asking for one knowledgeable employee (for example, oncology specialists, veterinary technicians, veterinary pharmacists, or administration staff) to participate in a 15-minute survey on behalf of your entire clinic. As recognition for your time and effort, we will donate \$10 to the SPCA for each completed survey. The survey addresses questions about drug preparation, administration, training, and protective equipment to acquire an understanding about how the sector is currently handling antineoplastics.

Even if you do not administer chemotherapy, that information is important for our research, and we would be grateful if you could take the time to complete the first few questions.

The primary investigator of the project is Dr. Hugh Davies. The survey is strictly for research purposes and is not intended to promote the sale of any product or device; you will not be contacted for marketing purposes as a result of participating in this survey. It is funded by WorkSafeBC's Innovation at Work program (worksafebc.com/en/resources/about-us/research/antineoplastic-drug-handling-potential-for-inadvertent-exposure-among-veterinarians). Your responses will be kept confidential and anonymous; results will only be tabulated and communicated confidentially to the participating veterinarian. Your participation in this survey is optional. You can indicate in the survey whether your clinic would be interested in performing surface wipe sampling of potentially contaminated surfaces in your practice.

To participate, please visit ubc.ca1.qualtrics.com/jfe/form/SV_a021530MqMMPEmp and click the link to the questionnaire. For questions about the survey or research project, please contact Fiona Senyk at fsenyk@gmail.com. The deadline to complete the survey is March 1, 2021. **WCV**

¹D. M. Dejoy, T. D. Smith, H. Woldu, M.-A. Dyal, A. L. Steege, and J. M. Boiano, "Effects of Organizational Safety Practices and Perceived Safety Climate on PPE Usage, Engineering Controls, and Adverse Events Involving Liquid Antineoplastic Drugs among Nurses," *Journal of Occupational and Environmental Hygiene* 14, no. 7 (2017): 485-493, doi: 10.1080/15459624.2017.1285496.

²A. L. Hall, H. W. Davies, P. A. Demers, A. Nicol, and C. E. Peters, "Occupational Exposures to Antineoplastic Drugs and Ionizing Radiation in Canadian Veterinary Settings: Findings from a National Surveillance Project," *Canadian Journal of Public Health* 104, no. 7 (2013), doi:10.17269/cjph.104.4167.

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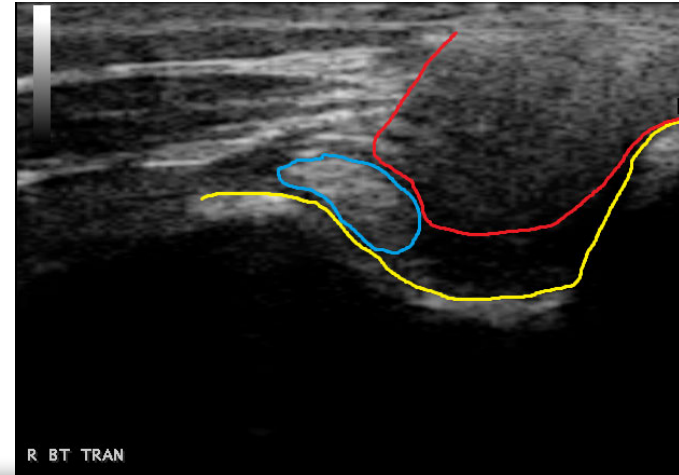
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FIGURE 1 (LEFT): Positioning the forelimb to place maximal stress on the biceps tendon. This position is frequently painful for dogs with bicipital disease.

FIGURE 2 (BELOW): Transverse ultrasound image of an enlarged supraspinatus tendon (red outline) displacing the biceps tendon (blue outline) from the bicipital groove (yellow outline).



DON'T CUT THAT—IT MIGHT BE IMPORTANT: RETHINKING HOW WE TREAT BICEPS TENDON DISEASE

The biceps brachii muscle originates via a tendon on the scapula, crosses the shoulder joint, and then inserts distal to the elbow. Its primary function is to flex the elbow, but it also plays a role in both extending and stabilizing the shoulder. Being a two-joint muscle, spanning both the shoulder and elbow, it restricts the amount of shoulder flexion that can occur with concurrent elbow extension. This makes it particularly vulnerable to injury, either by acute trauma or repetitive stress. Acute injuries often accompany falls in which the forelimb is folded caudally. Repetitive stress injuries can be the result of repeated sudden decelerations, impact from landing from jumps, or the strain of running downhill. Typically, biceps injuries are seen in active, larger, middle-age or older dogs, with forelimb lameness that varies from mild to severe.

On examination, the patient may show point tenderness of the biceps tendon as it runs down the intertubercular groove on the craniomedial aspect of the proximal humerus, or when the shoulder is flexed with the elbow in extension (Figure 1). Radiographs may show non-specific inflammatory or degenerative changes, but soft tissue imaging in the form of either an MRI or ultrasound is required to make a precise diagnosis. Ultrasound imaging is generally chosen over MRI as it requires only sedation and is less expensive. Alternatively, direct visualization via arthroscopy is another diagnostic option.

Inflammation of the sheath surrounding the biceps tendon (bicipital tenosynovitis) can also cause point tenderness along the intertubercular groove. A frequent cause of bicipital tenosynovitis is primary injury to the supraspinatus tendon, which can cause it to enlarge and encroach within the bicipital groove, resulting in focal impingement of the biceps tendon (Figure

2). As the biceps glides through this narrowing, a “kissing lesion” can form, resulting in focal pain. This means that although the biceps tendon and surrounding synovium may be the source of pain, the root cause is supraspinatus tendon pathology.

A common treatment for biceps tendon injury is to transect the tendon, usually by arthroscopic approach. Once transected, the tendon retracts distally, and presumably reattaches to the proximal humerus. This results in the tendon no longer spanning the shoulder joint, and therefore its role in both extending and stabilizing the joint is lost. There persists a common misconception that the biceps tendon plays no role in shoulder stability, the origin of which can be traced to researchers who misstated the conclusions of a 1982 qualitative paper by Vasseur. Subsequent quantitative research done in 2004 has shown that the biceps tendon plays a significant role in stabilizing the shoulder joint.

Transecting the biceps tendon is an effective technique for resolving pain, but what effect does it have on the long-term health of the shoulder joint? Given that bicipital injury is predominantly a condition of active dogs, how quick should we be to destabilize the shoulder joint?

In cases where the biceps tendon is not damaged, but rather is being impinged by an enlarged supraspinatus,

BY DAVID LANE, DVM, Dipl. ACVSMR

the decision to transect should be approached with even greater caution. When a dog is suffering injury to their primary shoulder extensor, the supraspinatus, we have to wonder whether transecting the shoulder's secondary extensor tendon will not result in greater strain on the already injured supraspinatus.

Researchers agree that an attempt should be made to treat the biceps tendon conservatively before proceeding to surgery. However, the examples of conservative treatment provided by these same researchers frequently include inadequate protocols, such as two weeks of exercise restriction plus carprofen, or a single injection of corticosteroid. Due to a lack of research, there is no consensus on what constitutes the best treatment of biceps tendon injury. What follows is an overview of how I address bicipital pathology and/or bicipital tenosynovitis in dogs.

STEP 1: GET A PRECISE DIAGNOSIS

The first step is to image the biceps tendon and surrounding sheath, as well as the adjacent supraspinatus tendon. I routinely do this via ultrasound under intravenous sedation. While the patient is sedated, I can also assess glenohumeral stability, looking for evidence of medial shoulder syndrome (rotator cuff tear). Images should be taken of both shoulders, even if the lameness presents as

“TRANSECTING THE BICEPS TENDON IS AN EFFECTIVE TECHNIQUE FOR RESOLVING PAIN, BUT WHAT EFFECT DOES IT HAVE ON THE LONG-TERM HEALTH OF THE SHOULDER JOINT?”

a unilateral condition. Most shoulder issues are chronic, with some degree of bilateral pathology. Additionally, multiple pathologies may be present in the same joint, and treatment should be designed to address all issues simultaneously.

The first question to answer is whether the biceps tendon is damaged. If it is not, then a tenotomy is not indicated. If the biceps tendon is normal, but tenosynovitis is present, determine if it is secondary to either supraspinatus tendinopathy, medial shoulder syndrome, or some other condition. Tenosynovitis can present on its own, with no evidence of pathology of any other structures. Such cases can be addressed as a primary tenosynovitis. It should be noted that medial shoulder syndrome cannot be completely ruled out based on ultrasound and palpation alone—arthroscopy is the gold standard for diagnosing this condition.

If the biceps tendon is damaged, then a tenotomy can be considered. Some tendons are salvageable, some are not, with no known objective measure to distinguish between the two. The greater the amount of tendon damage, the poorer the prognosis. My optimism for healing the tendon wanes if damage exceeds 50 per cent and disappears if it exceeds 70 per cent.

STEP 2: TREAT THE TENDON AND SURROUNDING SHEATH

The following is a list of treatments to consider for treating biceps tendon pathology or tenosynovitis, and a brief overview of where they are best indicated.

NSAIDs

Short-term NSAID use is indicated for acute injuries only; long-term use can impair healing, even while improving comfort. Most shoulder conditions are chronic, and chronic tendon injuries require increased vascular perfusion to facilitate healing. NSAIDs are inherently vasoconstrictive and therefore contraindicated in situations where vasodilation is desired.

Intra-articular corticosteroids

Intra-articular corticosteroids (IACs) are useful pain control agents and are a treatment option for tenosynovitis or osteoarthritis, as long as there is no concurrent connective tissue injury. Some cases require a second injection before a clinical response is seen. IACs should not be used in the presence of biceps tendon or medial shoulder pathology, as they will impair healing. Injection of corticosteroids into a tendon can result in focal necrosis, and should never be attempted unless the intent is to induce a complete tendon tear. Triamcinolone was not chondrotoxic in one in-vitro study, unlike methylprednisolone, which has been shown to damage cartilage and therefore should only be used for end-stage osteoarthritis where there is little cartilage left to preserve.

Hyaluronic acid

Repeated hyaluronic acid (HA) injections have been shown to improve comfort when injected intra-articularly. Similar to IAC, they are indicated when there is a need to reduce inflammation rather than repair tissue. On its own, HA is not my preferred intra-articular agent, mostly because of the need for repeated injections, but I routinely combine HA with IACs.

Exercise modification and therapeutic exercise

Exercise modification is universally indicated for bicipital issues as an adjunct to the primary treatment. Cage rest in itself accomplishes nothing, except to generate frustration-motivated behaviours. Rather, exercise modification means initially restricting the patient to low-velocity exercise on easy terrain for short durations, progressing to longer duration and

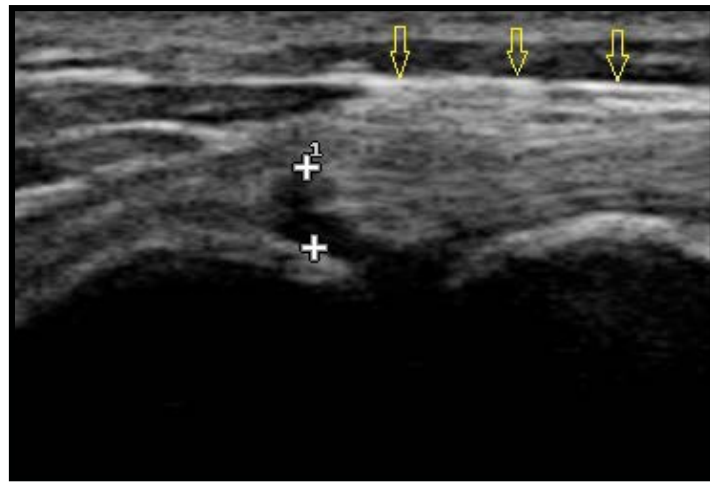


FIGURE 3: Example of an acutely torn biceps tendon (yellow arrows). The tear is visible between the two "+" symbols.

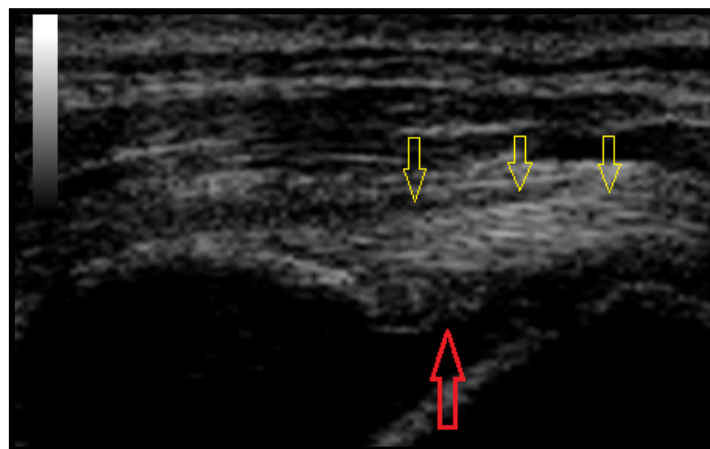


FIGURE 4: The same tendon as Figure 3, eight weeks following treatment with regenerative medicine. The site of the previous tear is indicated with a red arrow.

use for biceps tendon injury, it has been shown to completely resolve 88 per cent of supraspinatus tendinopathy cases, with the remaining 12 per cent showing partial improvement. Similarly, one research paper suggests its effectiveness in resolving early cruciate ligament injury is approximately 80 per cent. Subjectively, I am seeing similar results in using stem cell therapy to treat biceps tendinopathy.

STEP 3: CONSIDER SURGICAL OPTIONS

As mentioned above, in cases where the biceps tendon is deemed to be unsalvageable, if concerted conservative therapy has failed, or if the client declines conservative therapy, then surgical transection becomes the best therapeutic option. An open arthrotomy approach is discouraged because it requires elevating the pectoral muscle and has greater morbidity than an arthroscopic approach. However, there is a new technique that may prove to be even less invasive than an arthroscopic approach.

I teamed up with Dr. Teresa Schiller from the faculty of veterinary surgery at the University of Calgary to develop an incisionless technique for transecting the biceps tendon under ultrasound guidance. We developed the technique on cadaveric specimens, and I have since applied it to two clinical cases with results equivalent to those of an arthroscopic approach. The technique employs a hypodermic needle and can be performed under intravenous sedation plus local anesthetic. By eliminating the need for general anesthesia and expensive arthroscopic equipment, this procedure may be more affordable for clients. A full description of this technique is currently undergoing peer review with anticipated publication in 2021.

more challenging exercises as healing begins. The precise schedule of the exercise progression depends on the nature of the underlying diagnosis and the chosen treatment plan. For high-drive dogs, trazodone may be indicated in the early stages to facilitate calmer acceptance of enforced exercise restriction. In all cases, therapeutic exercise and prescribed targeted exercises designed to improve strength and stability are also indicated.

Photobiomodulation

Photobiomodulation (laser therapy) is indicated for all bicipital conditions, both for its pain control benefits and for its role in accelerating the healing of tissue, particularly poorly vascularized tissue such as tendon.

Extracorporeal shockwave therapy

Extracorporeal shockwave therapy (ESWT) is the application of sudden vibrations focally to a lesion to generate growth factors and facilitate healing. According to one study, it has been shown to be 85 per cent likely to produce "good" or "excellent" outcomes for bicipital or supraspinatus injury. It can be used to resolve tenosynovitis, or minor tendon damage, but for more extensive damage, I prefer some form of stem cell therapy.

Therapeutic ultrasound

Therapeutic ultrasound may have some utility in accelerating the healing of damaged tendon, but the research is less convincing than that for either photobiomodulation or ESWT. Personally, I have been overwhelmed by its benefits and have abandoned its use in favour of other techniques. However, if it was all I had access to, I would employ it.

Platelet-rich plasma

Platelet-rich plasma (PRP) is my preferred agent to inject intra-articularly for cases of tenosynovitis where there is no significant damage to the biceps tendon. If significant tendon damage does exist, then I combine PRP with stem cells to facilitate tendon repair.

Stem cells

Some form of stem cell, either cultured from fat or harvested from bone marrow, combined with PRP, is my treatment of choice for biceps tendons with macroscopic damage (Figures 3 and 4). In my experience, access to this technology has been a game changer for resolving shoulder pathology. Although we have no research on its

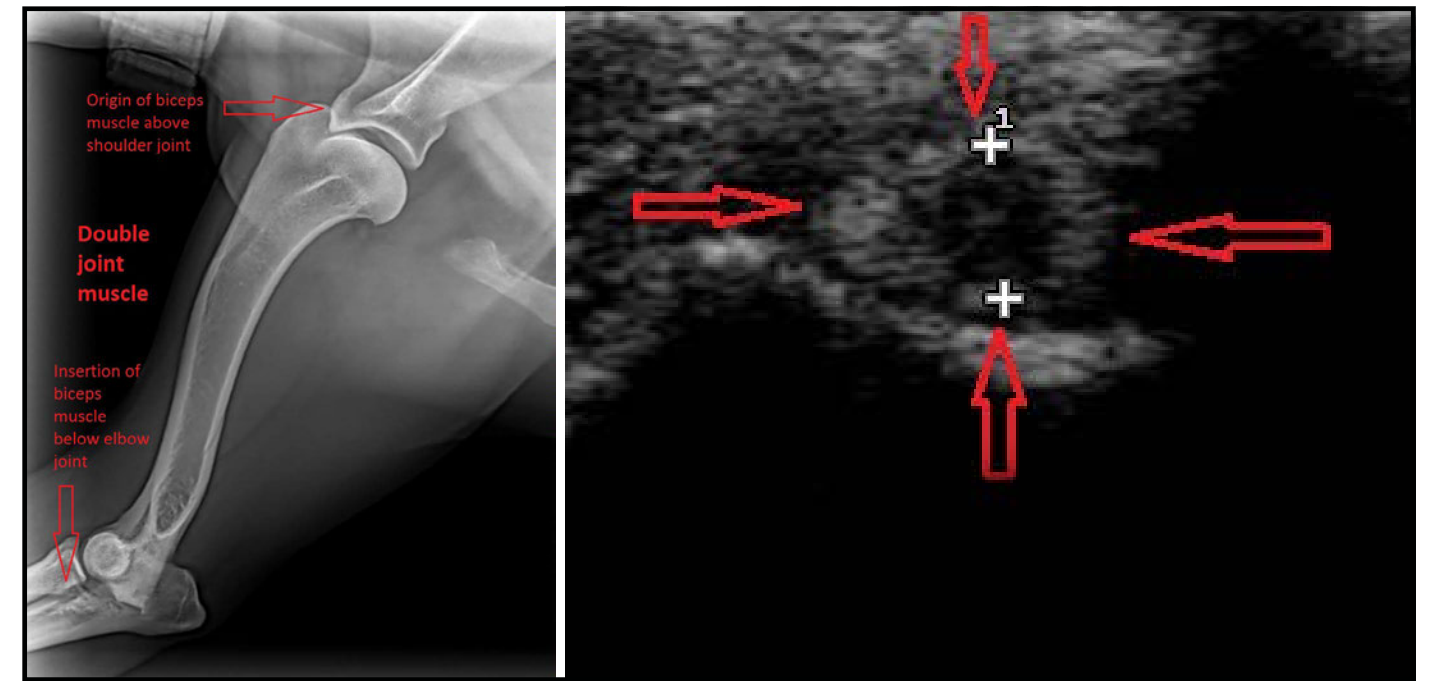


FIGURE 5: Radiograph showing the origin and insertion of the biceps muscle.

FIGURE 6: Ultrasound image of a biceps tendon with a core lesion. WCV

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STANDARDIZED TESTING IN THE SHELTER: RECENT RESEARCH SHOWS SOCIABILITY ASSESSMENTS TO BE PROBLEMATIC

BY ALEXANDRA PROTOPOPOVA, PhD, AND KELSEA M. BROWN, PhD

Historically, animal shelters (formerly named “animal control” or “pounds”) were tasked with removing stray animals from city streets to reduce the risk of bites. Animals were then killed, using methods that we may now deem rather inhumane. Luckily, not only did humane euthanasia revolutionize care, but also many animal shelters began making the strays available to the community for adoption. This, of course, created a problem: given that we don’t know an animal’s background history, how can we protect public safety? This is a question that modern animal shelters and humane societies are still actively trying to answer. One proposed solution was to develop and administer standardized behavioural testing in the hopes of discriminating between dogs who will be good house pets and dogs who are a danger to people. Currently, almost all animal shelters use some standardized behavioural assessment (89 per cent of shelters in the US¹) and more than half use assessments that they have made up themselves.² This is rather worrisome, since many staff will base euthanasia decisions on the outcomes of these assessments. When faulty assessments are used, animals are needlessly euthanized at the hands of those who are tasked with animal protection.

These standardized tests come with several assumptions. The first is that dogs display consistent behavioural traits—a stable personality—regardless of whether the dog is in a shelter or a home environment. The second assumption is that the outcome will be the same regardless of who administers the test and when and how frequently it is administered—that the test is reliable. And the third assumption is that the test is able to measure personality accurately—that the test is valid.

Although a multitude of standardized tests exist in animal sheltering, all have one testing item in common: human-directed sociability. This test item aims to assess how motivated a dog is to positively engage with strangers, measuring both bite risk and future adoptability. However, depending on which assessment a shelter uses, the sociability test varies widely in its actual procedure. For example, some tests

will keep the dog on a leash, but other tests are done off-leash. Some tests will have the tester kneel to the dog’s level, while other tests ask the tester to remain standing. The wide range of methodological differences creates a serious possibility that the tests may not be measuring what we think they are measuring. To test this hypothesis, Dr. Kelsea Brown studied different versions of sociability assessments.³ She wanted to determine how valid these tests actually were—were the outcomes of the assessments the same even with the wide range of methodological differences?

The short answer is a definite no.

In two separate experiments, Dr. Brown enrolled 49 dogs housed at a shelter in Texas, United States. She administered different sociability tests in random order to each dog using a mixed-subjects design, which allowed her to draw conclusions about how the various procedures affected each dog’s sociability. In experiment 1, dogs were randomly placed into one of two experimental conditions—during the test, the experimenter either provided social interaction in the form of petting and praise or did not provide any social interaction (control condition). Then, each dog received the following three conditions repeatedly in a random order: 1) the tester was standing during the test, 2) the tester was sitting on a chair during the test, and 3) the tester was kneeling during the test. All assessments were video recorded, which allowed Dr. Brown to look through the videos and collect data on human-directed social behaviour of the dogs. She found that the behaviour of the dogs was dependent on the experimental condition. For example, the experimenter’s posture and social interaction affected how long the dog spent in proximity. In experiment 2, she extended her study by including another methodological difference: whether the dog is leashed or not. Unsurprisingly, even this minor methodological difference resulted in clear differences in human-directed behaviour. Leashed dogs spent more time in proximity, engaged more in physical contact, gazed more at the tester, and remained in a sitting or lying down position compared to the off-leash dogs.

The most striking—and concerning—results came in an additional analysis of the data. Dr. Brown ranked the dogs from “most” to “least” sociable based on their behaviour in each condition. What she found was the final nail on the coffin of sociability tests: depending on the procedural variation used, the same dog can be rated as both high and low on the order of sociability. In other words, the test itself will determine whether an individual dog scores low or high on human-directed sociability. And that means that the sociability tests used in shelters are not valid.

So where do we go from here? Animal shelters are still tasked with protecting public safety and thus allowing adoption of dangerous dogs is out of the question. Perhaps we can take a lesson from human standardized testing and accept that these tests are simply not adequate for making life

“...ANIMALS ARE INDIVIDUALS WITH RICH HISTORIES AND BEHAVIOURAL REPERTOIRES.”

and death decisions. Instead, many animal shelters are moving toward more holistic assessments, such as gathering data from surrendering owners, continuous informal observation of the dog in the shelter, and asking volunteers and foster homes to provide new owners with information on how the dog had behaved in certain situations while in their care. Ultimately, we are moving toward a more humane way to assess animal behaviour. We must understand that animals are individuals with rich histories and behavioural repertoires, and that no brief standardized test conducted by a stranger in the strange stressful environment of an animal shelter will tell us about something as big and complex as a dog’s personality or future behaviour in a loving home.

The original research article can be found in *Behavioural Processes* 177 (August 2020) 104145. [WCV](#)

¹H. Mohan-Gibbons, E. Weiss, and M. Slater, “Preliminary Investigation of Food Guarding Behavior in Shelter Dogs in the United States,” *Animals* 2, no. 3 (2012): 331–346.

²S. D’Arpino, S. Dowling-Guyer, A. Shabelansky, A. R. Marder, and G. J. Patronek, “The Use and Perception of Canine Behavioral Assessments in Sheltering Organizations,” in *Proceedings of the American College of Veterinary Behaviorists/American Veterinary Society of Animal Behavior Veterinary Behavior Symposium* (San Diego, CA: ACVB/AVSAB, 2012), 27–30.

³K. M. Brown, E. N. Feuerbacher, N. J. Hall, and A. Protopopova, “Minor Procedural Variations Affect Canine Behavior during Sociability Assessments,” *Behavioural Processes* 177 (August 2020) 104145.



PHOTO BY RAVENNIK/SHUTTERSTOCK.COM



JANGI BAJWA, BVSc & AH, Dipl. ACVD, is a board-certified veterinary dermatologist with the American College of Veterinary Dermatology. He works at the Veterinary Dermatology and Ear Referral Medical Clinic in Surrey, BC. He is also a consultant with the Veterinary Information Network and is a dermatology feature editor for the *Canadian Veterinary Journal*. His dermatology interests include otitis and its treatment, microbial resistance, canine and feline allergic disease, and continuing education of veterinary professionals and pet owners.



KELSEA BROWN, PhD, is an independent research scientist with interest in companion animal behaviour and welfare, and human social justice issues. She completed the described studies as part of her doctoral work at Texas Tech University.



HUGH DAVIES, BSc, MSc, PhD, CIH, is a senior researcher at the School of Population and Public Health at the University of British Columbia with expertise in exposure assessment. He is currently the primary investigator on an ongoing study of antineoplastic drug surveillance in Alberta and Minnesota hospitals. He has been a principal investigator on over 25 previous studies and has authored over 60 peer-reviewed publications in the field of occupational and environmental exposure assessment.



MARK HARMON, DVM, Dipl. ACVIM (Cardiology), is a cardiologist at Boundary Bay Veterinary Specialty Hospital in Langley. He obtained his DVM from the University of Missouri in 2011 and completed a rotating small animal internship at the University of Pennsylvania followed by a cardiology specialty internship and then residency at the University of Missouri. He has been a board-certified cardiologist since 2017, at which time he began practising at a large private practice in Seattle. In May 2020, he and his wife moved to British Columbia and are excited to continue hiking, kayaking, and exploring the region.



NICOLETTE JOOSTING, BSc, BVSc, DVM, graduated from the University of Pretoria (Onderstepoort), South Africa, in 1998. She owned Vancouver Feline Hospital and Vancouver Feline Veterinary Housecall Service. She is a member of the Animal Welfare Committee of the CVMA-SBCV Chapter and currently enjoys semi-retirement in Harrison Hot Springs.



ELAINE KLEMMENSEN, DVM, is always up for an adventure, especially if it involves people, pets, and creating connections within the veterinary profession. Her adventures in veterinary medicine have included being an associate veterinarian, partner, practice owner, locum, and international volunteer. Passionate about leadership development and workplace culture, she recently embarked on her latest adventure, founding Evolve Leadership Coaching and Consulting where she is determined to help veterinary leaders discover the "secret sauce" that will move their team from surviving to thriving. A student at Royal Roads University, Elaine is a graduate of the Values-Based Leadership Certificate and is currently enrolled in the Executive Coaching program.



DAVID LANE, DVM, Dipl. ACVSMR, operates Points East West Veterinary Services, a sports medicine and rehabilitation medicine specialty practice in Squamish, BC. His caseload includes the diagnosis and treatment of lameness conditions in both working and pet dogs. Approximately one-third of his practice is devoted to the palliative treatment of geriatric animals for chronic pain conditions such as arthritis. His research interests include the use of regenerative medicine in tendon and ligament repair, and the link between lower back pain and urinary incontinence.



LOUISE LATHEY, BLES, completed her Bachelor of Law Enforcement Studies at the Justice Institute of British Columbia and uses her knowledge of the law in her work at the BCSPCA. Her passion for animals has led to cross-sector collaboration on helping vulnerable people and pets. Her master's research in criminal justice at the University of the Fraser Valley explores the rationale behind animal cruelty with a focus on how it relates to other types of crime.



ALEXANDRA PROTOPOPOVA, PhD, has a doctorate in behaviour analysis from the University of Florida. She is an assistant professor in the University of British Columbia's Animal Welfare Program. Her research focuses on the physiology, behaviour, and welfare problems experienced by companion animals housed in shelters and pet homes.



FIONA SENYK, BA, is completing her master's degree in the School of Population and Public Health at the University of British Columbia and completed her Bachelor of Health Sciences at Simon Fraser University. She is passionate about recognizing and controlling workplace hazards so that workers return home to their families healthy and safe.



KATHRYN WELSMAN, DVM, has written for *West Coast Veterinarian* for nearly 10 years and enjoys telling a story. During that time, she's worked as an emergency veterinarian, general practitioner, and CVBC inspector. She's volunteered as a board member for the Langley Animal Protection Society and as a veterinarian for the BC Wildlife Park. Recently, she has taken on an advisory role with Ned's Wish, a non-profit society that assists with medical bills for retired police dogs. Her biggest passion is working dogs. She spends a lot of time learning about working dogs, especially police dogs, providing education for the dogs' handlers, and advocating for the dogs.



BARBARA WILHELM, PhD, DVM, is an OVC '82 grad, and practised first in Saskatchewan for two years, and then in Vermilion, AB, until she closed her practice at the end of 2017. Most of her working life has been spent in large animal practice; however, her biggest interest in practice has been herd problems, and to learn more about those she completed an MSc in epidemiology through the University of London in 2007 and a PhD in epidemiology from the University of Guelph in 2016. As an epidemiologist, she has worked at a distance for over a decade with the Public Health Agency of Canada in research synthesis but has also had the chance to work on a variety of other projects, including risk analysis and assessment of surveillance systems.

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WHO'S WHO IN THE VETERINARY WORLD

DR. MARY JANE IRELAND is the new executive director of the Animal Health Directorate and deputy chief veterinary officer at the CFIA.
DR. BALJIT SINGH joins University of Saskatchewan President Peter Stoicheff's leadership team as vice-president research in February.

SHUT THE DUCK UP

BY ELAINE KLEMMENSEN, DVM

She clasped her trembling hands together in an attempt to calm her nerves and quiet the quacking voice inside her head—the voice that kept resurfacing like an annoying jingle that couldn't be forgotten. “A few lucky breaks and a few hundred published articles don't make you a writer. Who are you to think you could write a novel?”

She had submitted the first chapter of her novel for review to a group of writers at Simon Fraser University. As she waited for the respected author to critique her work, that voice spoke up again. “You should just leave. Look at all the red marks on your manuscript. You might call yourself a journalist, but today the ruse is up. They're going to discover you're a fraud.”

At the last minute, she had almost backed out and begged her husband to go in her place. He refused, leaving her alone with the quacking in her head while she waited for the well-known novelist to provide feedback. After a few minutes of silence, he lifted his head from the pages that lay in front of him and said, “You are the one we have been waiting to meet, Corey.”

It turned out every red mark, without exception, was a note that something was great. Not one criticism.

I am grateful to our brave editor Corey Van't Haaff for sharing this story with me and bringing a personal lens to a feeling common among many high-achieving and highly deserving people: impostor syndrome. Identified in 1978 by psychologists Pauline Clance and Suzanne Imes, impostor syndrome is not a disease but rather an internal experience where people feel they do not deserve their accomplishments and have faked their way to success. While everyone has moments of professional insecurity, those who suffer from impostor syndrome have intense feelings of self-doubt and anticipated failure. Regardless of evidence to the contrary, they attribute their success to luck or help from others rather than their abilities and hard work. In the extreme, these feelings can lead to anxiety, intense fear of failure, a loss of confidence, and the inability to enjoy and embrace the opportunities they deserve.

Any of this sound familiar?

It may comfort you to know you are in good company. Many well-known public figures, including Maya Angelou, Sheryl Sandberg, Neil Gaiman, and Tom Hanks, have admitted to struggling with impostor syndrome. Comedian Mike Myers once said, “I still expect that the ‘no talent’ police will one day come and arrest me.”

It is important to recognize that impostor syndrome arises in spaces where judgments are made about merit. Professional accomplishments and advancement are a common arena where feelings of inadequacy, not belonging, and fraud arise. Equally important is the recognition that these feelings are just that, an internal dialogue that is not an accurate reflection of your external reality. By recognizing impostor syndrome for what it is, you can start to write a new story for yourself and take the first step to create alignment with how the world sees you and how you see yourself.

SHIFTING YOUR PERSPECTIVE

Just like Corey, you probably have your own duck quacking away inside your head; giving you daily reminders that you are not good enough and don't deserve your success. So how exactly do you “shut the duck up”? Shifting your perspective requires self-awareness and a willingness to be introspective. Career coaches recognize that people with impostor syndrome often have trouble seeing their strengths. It can be difficult to start seeing yourself how others see you.

Experts recommend starting a journal where you list at least three things you did successfully that day. Be sure to keep all the thank-you letters you receive and re-read them to remind yourself that you are appreciated and worthy. Finally, consider writing yourself a letter of recommendation so you can see your accomplishments through someone else's eyes.



“...IMPOSTOR SYNDROME ARISES IN SPACES WHERE JUDGMENTS ARE MADE ABOUT MERIT.”

In addition to self-reflection, consider forming your own personal “board of advisers.” Enlist trusted and respected mentors who can provide honest feedback about your performance. Remember, if you respect them, respect their opinion about you. Embrace the insights they offer that illuminate your blind spots and commit to hearing their compliments without dismissing them. Over time, these practices will start to reframe how you see yourself and give the duck less power.

REFRAMING EXPECTATIONS

At graduation, I recall one of my classmates announcing he was going to give all his spay patients a 50-50 prognosis. This way, he reasoned, clients would not be disappointed. While this might be a bit extreme, the reality is many people with impostor syndrome have unrealistic expectations of what it means to do a good enough job. It is important to challenge your perceptions of what success looks like. What is a realistic expectation for surgical skills in a newly graduated veterinarian? Be sure to see yourself in context and compare like to like. It is unrealistic, for example, to expect to have the same level of expertise as a veterinarian who has been practicing for five years.

Perfectionism, along with flawed or limiting beliefs about success, failure, and self-worth, lies at the heart of impostor syndrome. These flawed beliefs drive people with impostor syndrome to procrastinate and avoid situations where they might not succeed. They may also strive to outperform others in a relentless search for external validation.

As you challenge these beliefs, start to focus on what you have accomplished in and of itself, rather than what you had hoped to accomplish. What you have, instead of what you had hoped to have. What you have learned, instead of what you still have to learn. Start to reframe failure as an opportunity to grow and improve rather than a reflection of your self-worth. Consider the fact that the most competent people are good at leveraging the strengths and expertise of others. Asking for help is not a sign of weakness but rather a sign of wisdom.

YOU ARE NOT ALONE

Mike Cannon-Brookes, CEO of the software company Atlassian, said it best in his TEDX talk titled “How you can use impostor syndrome to your benefit.” Like many of us, he assumed successful people do not feel like frauds. He goes on to describe his own lightbulb moment: “I realized that other people also feel this way, and it does not go away with any form of success.”

The realization that you are not alone and that impostor syndrome can be overcome is empowering. It is OK to feel as if you jumped into the deep end of the pool and don't know how to swim. As terrifying as it is, it is OK to be in over your head; just don't freeze. Start kicking your legs. Start moving your arms. Ask for advice on how to improve your stroke and apply that advice to move forward. When you finally grasp the pool edge, take a moment to celebrate your achievement. And if there happens to be a quacking duck in the pool with you, don't be afraid to tell it to shut the duck up! [WCV](#)

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Thanks to Marjorie Busse, CEC, MCC, of Essential Impact Coaching for the phrase “shut the duck up” as a reminder to quiet the negative critic each of us has inside our head.

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