



VETERINARY SPECIALTY & EMERGENCY HOSPITAL

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VETERINARY SPECIALTY & EMERGENCY HOSPITAL



SUMMER 2021 NEWSLETTER

SUMMERTIME IS JUST AROUND THE CORNER!

Summer is so close and we are ready for all of it! We are so excited to get out and explore everything our beautiful state has to offer while soaking up the warm weather!

This summer edition of our newsletter highlights our Cardiology, Internal Medicine, and Surgery & Orthopedics teams, as well as updated info and news about the hospital.

The VRCC Surgery & Orthopedics team shares information about their practice, specialists, and support staff in the Department Highlight section below.

VRCC Internal Medicine highlights their two client care coordinators in the Staff Highlight Section to the right on this page.

Our case study for this issue is presented by, Dr. Derek Hanes with our Cardiology department. He discusses Sick Sinus Syndrome in a dog named Sassafras.

As always, please feel free to call or email us with any questions you may have.

We hope you have a safe, cool, and fun Summer season!

Your VRCC Team

DEPARTMENT HIGHLIGHT: VRCC SURGERY & ORTHOPEDICS

VRCC Surgery and Orthopedics is an essential part of the VRCC team. We have four excellent and dedicated surgeons (three are board certified and one is limited to surgery only) along with two skilled board certified anesthesiologists. We have an awesome team of technicians that all play vital roles in our department. Our technicians do it all from anesthesia monitoring, patient care, assisting in surgery, transitioning patients in and out of the operating rooms, radiographs, recovering post-operative patients and running appointments, to keeping our doctors on track! Lastly, we have two dedicated and compassionate coordinators that take care of our scheduling, client calls, medical records, and communications.

Our team takes pride in our exceptional patient and client care. Keeping our referring community included in their patients' care is of utmost importance. We are always available for our clients and referring veterinarians via phone, email, and text. Taking the time to walk clients through their upcoming experience with VRCC if they elect to pursue consultation, procedures, and surgery with us is a great part of our job. We appreciate that factors such as timing of appointments, cost, and great medical care are all very important to our clients, and we are dedicated to guiding them to the right fit, VRCC or elsewhere, while providing information to keep their pet safe/healthy/happy until they receive the needed care. At VRCC, we are often able to offer same day appointment and surgery options for our patients to streamline the process and decrease the worry. Our surgical team is experienced in all types of orthopedic, soft



STAFF HIGHLIGHT: INTERNAL MEDICINE

Meet Megan Farrell and Lauren Farr! Megan and Lauren are the Incredible Client Care Coordinating Duo for the VRCC Internal Medicine team. They make client calls and scheduling look easy by devoting themselves to provide the very best for our patients.



Megan joined the Medicine team from Long Island, New York. (What a drive that was!) Moving across the country was easily the best decision she has ever made. Giving up the ocean for the mountains was tough, but the view has been worth it these last 3 years. If she's not answering the phone at VRCC, she's either playing in the dirt in her home garden growing all kinds of herbs and vegetables, or taking a dance class such as ballet, Zumba, or pole.

She also enjoys hiking a trail with her dog, Julius Caesar Salad. Megan believes having her first dog made her a better human. She loves to connect with all of the Internal Medicine clients and is happy to help any way she can!

Lauren joined the Medicine team from Brewster, NY. Lauren was born and raised in NY and moved to CO in September of 2020. Even though she misses the east coast, she feels she is exactly where she needs to be. In her spare time she loves to sing country music (in fact, she used to compete in competitions around the states!) and adventure into the mountains with her two pups Dexter and Maui. She's also a huge fan of hot sauce and is always looking for new ones to try. Lauren is very passionate about land animals, as well as sea life and hopes to go back to school someday to study Marine Biology. Her dream is to work with Orca whales and sharks. She is excited to be a part of the VRCC family and build new relationships with clients and their pets.

VRCC Internal Medicine can be reached by calling 303-874-2055, or emailing internalmedicine@vrcc.com.

tissue, and oncologic procedures. Each team member brings unique knowledge and experience enhancing the care we can offer our patients. Cases are often complicated and our team is ready to help our clients and referring doctors work through the best options available. Our surgery team is available Monday through Friday 7am-5pm along with after-hours for emergency surgical care facilitated through our emergency department. We are always thrilled to help our referring community with case questions and radiographs to help facilitate the best patient care possible. We look forward to helping our four legged patients get healthy and back to enjoying life with their families - please do not hesitate to reach out to us! The VRCC Surgery & Orthopedics team can be reached directly via email at surgery@vrcc.com, or by calling 303-874-2073.

VRCC NEWS & ANNOUNCEMENTS

 We would like to welcome Drs. Hannah MacAyeal and Emily Peterson to the VRCC Emergency team! After several relief shifts, Dr. MacAyeal officially became part of the VRCC family in May! And Dr. Peterson will be available to see emergency cases starting mid-July.

 Are you on our email list for CE announcements, invites and other hospital news? Send a message to Ruby Post to get yourself and/or your clinic signed up. Make sure to add vrcc@vrcc.com and rpost@vrcc.com to your 'safe senders' list.

 How is your supply of VRCC referral materials looking? We have VRCC brochures, magnets, business cards, and Pet ER booklets that we are happy to provide! Shoot us an [email](mailto:vrcc@vrcc.com), or give us a call to let us know what materials you'd like.

 VRCC Cardiology is currently taking part in a new clinical trial for dogs with CVHD or DCM and are looking for eligible dogs to enroll. Suitable dogs must be presenting with clinical signs of pulmonary edema. Contact VRCC Cardiology for more enrollment requirements and additional information at 303-874-2094, or cardio@vrcc.com.

COVID-19 Update for VRCC

We have re-opened our hospital to clients and patients! Read below for our updated procedures ([also posted on our website](#)).

Specialty Department Appointment Protocol:

ALL clients still need to call the main hospital number (303-874-7387), or the department they are scheduled with when they arrive for their appointment. At that time, our staff will ask the client if they prefer to stay curbside, or come into the hospital for their appointment.

*If curbside is elected, we will follow our previous procedures for curbside appointments.

*If it is elected to come into the hospital (provided the client(s) is not exhibiting symptoms or tested positive for COVID-19 within the previous 14 days):

- All clients are required to wear a mask while they are in the building, regardless of vaccination status.
- 2 people per appointment will be permitted inside the hospital. Additional people will be asked to wait outside.
- A VRCC staff member will come out to the vehicle and escort the patient and client(s) into the building, straight into an exam room.
- When the appointment has concluded, a VRCC staff member will escort the client(s) out of the hospital.

All payments for services will be completed in the exam room, over the phone, or in the parking lot prior to the client's departure.

Emergency Department Protocol:

ALL clients still need to call the main hospital number (303-874-7387) when they arrive for an Emergency visit. At that time, our staff will ask the client if they prefer to stay curbside, or come into the lobby to wait.

*If curbside is elected, we will follow our previous procedures for curbside visits.

*If it is elected to come into the lobby (provided the client(s) is not exhibiting symptoms or tested positive for COVID-19 within the previous 14 days):

- All clients are required to wear a mask while they are in the building, regardless of vaccination status.
- 2 people per visit will be permitted inside the hospital. Additional people will be asked to wait outside.
- A VRCC staff member will come out to the vehicle and escort the patient and client(s) into the building, straight into one of our numbered lobby booths. Clients will need to stay in their designated booth for the duration of the visit. If all lobby booths are occupied, clients will be asked to wait outside.
- Clients waiting on procedures, lab results, or extended stays may be asked to wait outside.
- When the appointment has concluded, a VRCC staff member will escort the client(s) out of the hospital.

All payments for services will be completed in the lobby, over the phone, or in the parking lot prior to the client's departure.





Derek Hanes, DVM
Diplomate ACVIM
(Cardiology)
VRCC Cardiology

Sick Sinus Syndrome

Sassafrass, a 12-year-old spayed female Corgi mix, was presented to the cardiology service on April 29, 2021 for evaluation of episodes of collapse. The collapse episodes had originally started in November of the preceding year, occurring approximately one to two times weekly at that time. She was taken for evaluation with her primary care veterinarian in February 2021, when episodes seemed to have increased in frequency, occurring daily at that time. Episodes of collapse continued to increase in frequency, progressing to occurring multiple times daily over the following 2 months. She was evaluated by a traveling veterinarian who noted an abnormally slow heart rate and was recommended she be evaluated with the cardiology service for potential arrhythmogenic causes of collapse.

Upon presentation to the cardiology service, Sassafrass was noted to have a heart rate of 132 beats/min with slight irregularity and occasional brief pauses. Baseline ECG performed revealed a predominant sinus rhythm with instantaneous rate ranging between 120-180 beats/min, and occasional brief sinus pauses lasting up to 4 seconds in duration. Echocardiogram was performed to evaluate for structural causes of abnormal heart rhythm and failed to reveal any significant structural cardiac abnormalities as a cause of potential conduction disturbance in Sassafrass' case. Though no structural abnormalities could be identified, it remained to be determined whether the irregularity to Sassafrass' heart rhythm could be related to extra-cardiac, neurogenic influence or primary conduction disturbance in nature, therefore an atropine response test was performed. Approximately 0.04mg/kg atropine was administered intravenously and given 5 minutes to take effect while monitoring surface ECG. The rhythm remained unchanged for that time frame (Figure 1) and therefore Sassafrass' arrhythmia was determined

to be Sick Sinus Syndrome. Persistent pauses lasting up to 3s in duration were continued to be observed following atropine administration.



Figure 1: Sassafrass' ECG

Given episodes of collapse appeared to be occurring multiple times daily, it was elected to pursue placement of a permanent transvenous pacing system. She was started on theophylline ER (100mg orally every 12 hours) to attempt to maintain physiologic heart rates. The following 2-3 days, Sassafrass continued to have multiple episodes of collapse warranting a trip to the emergency room, at which time the arrhythmia was recurrently identified. She was discharged with continued theophylline care with plans to place pacing system at the earliest opportunity.

Sassafrass presented the morning of May 4, 2021 for placement of permanent transvenous pacemaker. Baseline complete blood count, biochemical profile, and abdominal ultrasound were performed yielding no evidence of co-morbidities inferring significant risk for anesthesia or significant risk for shortened life expectancy despite pacemaker implantation. Sassafrass had her right cervical region, as well as bilateral thorax clipped. A temporary, trans-thoracic pacing system was placed on the chest in standard fashion. Anesthesia was induced using combination ketamine/propofol following a butorphanol/midazolam pre-medication, and continued as a continuous rate infusion until appropriate pacing was established. Approximately 1-2 minutes following induction and sterile



surgical preparation, extended sinus pauses lasting up to 10-12 seconds in duration were observed, interrupted by brief periods of sinus bradycardia. Temporary pacing system was engaged at 60 beats/min while external jugular cut down was performed and a 52cm passive fixation lead was advanced into the right ventricular apex using fluoroscopic guidance (Figure 2). The lead was transfixed to the generator and once adequate pacing was identified, temporary pacing was discontinued. The lead was sutured into position after adequately testing for tension and redundancy and generator placed into a subcutaneous pocket created behind the right external pinnae. Sassafrass recovered uneventfully and discharged for home care and exercise restriction for a further 4 weeks with gabapentin, carprofen, and cefpodoxime for post-operative pain management and infection prophylaxis respectively.



Figure 2: Intra-op pacemaker placement

Upon two-week recheck examination, both Sassafrass' right external jugular, as well as right lateral cervical incision appeared to be completely healed and external sutures were removed. Recheck heart rate assessment and surface electrocardiogram revealed a stable heart rate of 80 beats/min, the basal rate of the pacing settings. Sassafrass was again discharged with plans to recheck pacemaker interrogation and optimize output settings in a further 3 months after inflammation has fully subsided.

VRCC Cardiology can be reached at 303-874-2094, or cardio@vrcc.com.