

Newsletter



internal medicine • surgery • emergency & critical care • dermatology • radiology, ultrasound & CT scan



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Hello!

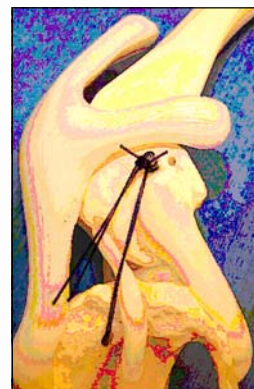
We are on to our second issue of the Wheat Ridge Veterinary Specialists' Newsletter. Among other things, this quarter we have an update on Cranial Cruciate Ligament disease, and a feature on our resident program and our two residents. Enjoy!

Cranial Cruciate Ligament Disease and Treatment Options - An Update

As we are all aware, the most common orthopedic injury and cause for rear limb lameness in dogs is damage to the Cranial Cruciate Ligament (CCL) of the knee. Dogs can injure this ligament in a variety of ways. All shapes, sizes, and ages of dogs can suffer this injury. Damage to the CCL, either partial or complete rupture, results in progressive lameness, development of osteoarthritis, osteophyte production, and often meniscal damage. A recent well conducted survey of veterinarians and board-certified veterinary surgeons, placed the economic impact of CCL disease at approximately \$1.3 billion per year nation wide. Why is this injury so common? No scientific study has documented a definite cause. Many factors are important: excess body weight, repeated explosive activity (e.g. jumping to catch a ball), prolonged inactivity or lack of conditioning (e.g. the "couch potato" dog), bone conformation, genetics or inheritance, and simple bad luck. Research into the cause and prevalence of CCL disease is on going at several universities. A recent study out of the University of Iowa found a genetic association indicating inheritance for CCL injury in Newfoundlands. Undoubtedly, more information will become available in the future.

What to do for CCL injuries?

Surgery is usually the best answer. We recommend arthroscopy prior to surgery (during the same anesthesia) to more completely evaluate the joint, confirm partial vs. complete tear of the CCL, determine the presence or absence of cartilage and/or meniscal damage, document the level of arthritis present, and lavage or wash out the joint without needing to open the joint surgically. Arthroscopy allows for a 10-fold magnified view of all joint structures. Surgically opening the joint, arthrotomy, has been shown to cause increased postoperative osteoarthritis and is definitely associated with more postoperative pain.



TPLO

Arthroscopy is obviously minimally invasive, requiring only a 2.7mm stab incision. Once the CCL has been damaged, either a partial or complete tear, surgical stabilization is the recommended treatment. In humans with ACL injuries, the damaged ligament is actually replaced using other ligament tissues (e.g. patellar tendon, cadaver ACL). Although we have tried these techniques in dogs, results have been inconsistent, unpredictable and unreliable. Currently, there are three (3) techniques most commonly used

LFS



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Appointment Hours:
Mon - Fri: 9 am to 5 pm
Sat & Sun: 9 am to 5 pm
24-hour Emergency Hospital

Meet Our Residents



Elizabeth Ashbaugh, DVM Emergency and Critical Care Resident - 3rd Year

Dr. Ashbaugh was born and raised in Austin, Texas. She attended The University of Texas in Austin where she studied music and chemistry. She then attended Texas A&M College of Veterinary Medicine where she received her Doctor of Veterinary Medicine in May 2006. While at Texas A&M, she participated in research and publications that focused on the genetics and biological control of the red imported fire ant in Texas. After completing her internship with Wheat Ridge Animal Hospital in June 2007, she was selected to stay on board for the residency program specializing in emergency and critical care medicine. Her professional interests include emergency surgery, metabolic crisis and trauma.

Dr. Ashbaugh's other interests include music; she has been a member of several symphony orchestras in Texas, Montana, Washington DC, Germany and Austria. She also enjoys hiking, cooking and playing with her terriers, Annie and George.



Stacy Meola, DVM, MS Emergency and Critical Care Resident - 1st Year

Dr. Meola was born in Las Vegas, Nevada and moved to Breckenridge, Colorado when she was thirteen where she graduated from high school. She attended the University of Utah and received her Bachelor's degree in Biology and Chemistry and her Masters degree in Medical Laboratory Science. While in Utah she spent six years conducting research on artificial hearts and other biomedical devices. Dr. Meola earned her Doctor of Veterinary Medicine degree at Colorado State University in 2006, and accepted the internship at Wheat Ridge Animal Hospital. After completing this program in June 2007, she was selected to stay on for a surgical internship. Dr. Meola is now continuing her training as a resident in Emergency and Critical Care.

Dr. Meola lives in Lafayette with her four dogs, Casey Grace, Grover Boophilus, Cooper and Nitah, and her cat Mikey. In her spare time, she enjoys photography, kayaking and cooking all of the things in her garden.

Cranial Cruciate Ligament Disease (continued from page 1)

and all are considered to be "extracapsular" or outside the joint: Lateral Fabellar Suture (LFS), Tibial Plateau Leveling Osteotomy (TPLO), and Tibial Tuberosity Advancement (TTA). These techniques stabilize the knee but make no attempt to replace the damaged ligament. As we know, these techniques vary in several ways: patient selection, recovery, rehab requirements, short-term outcome, long-term outcome, and expense. Truthfully, the technique is only as good as the surgeon performing the operation and relatively equal results have been reported with each of these techniques. Recently, a new technique called the "Tight Rope (TR)" procedure has been published. This is basically another form of extracapsular stabilization using very strong "Fiber Tape" from the Arthrex company. Preliminary results with this technique are favorable and similar to results published for the other above mentioned procedures. At this time, there is no evidence based medicine to support one procedure over another, when all variables are considered. Most surgeons have a preference based on their own clinical experience and this is what they most likely recom-



Tightrope

mend to clients. Nonoperative management of CCL injuries, especially in large or active dogs, does not typically result in a favorable outcome.

Prognosis

CCL injuries are very debilitating and the prognosis following stabilization of the knee is dependent upon many factors: surgical technique used, experience and abilities of the surgeon, patient body condition score (BCS), patient fitness, owner compliance, rehabilitation/physical therapy, ancillary medications, and ancillary therapies employed (massage, acupuncture). Most surgeons feel that the TPLO and TTA procedures result in very good, 95% or better, outcomes and return to previous levels of activity, typically without the need for extensive physical rehab. With respect to the LFS technique, the results tend to be much more unpredictable, some dogs (especially smaller dogs and cats) do well, while others recover poorly. Without question, the LFS technique requires a significantly greater amount of postoperative rehabilitation and physical therapy to achieve a reasonable outcome. Even with extensive rehab, the LFS technique always results in greater arthritis development with greater loss in range of motion as compared to the TPLO or TTA procedures. The TR procedure is too new, with inadequate data accumulation, to compare to these other techniques.



TTA

Wheat Ridge Animal Hospital's Residency Program — By Elisa Mazzaferro, DVM, MS, PhD, DACVECC

Wheat Ridge Animal Hospital is the only non-university veterinary hospital in Colorado that has a residency program in Emergency and Critical Care Medicine. After passing a certifying examination, the new graduate veterinarian can practice in a general practice. Some veterinarians, however, choose to pursue a residency program and continue their training towards board-certification in a specialty of their choice. A resident trains under the guidance of board-certified specialists for an additional four years. After completing a one year internship and three year residency program, the resident is eligible to sit for rigorous specialty board examinations. If they are successful in passing that examination, they are considered to be a board-certified specialist.

To establish an emergency and critical care residency program, a veterinary facility must first apply to a peer review board of other emergency and critical care specialists of the American College of Veterinary Emergency and Critical Care, and demonstrate an ability to train a resident, have the ability to provide advanced care that includes radiology, ultrasound, emergency surgery at all hours, and ventilatory support for critical animals. This involves expertise in medicine, surgery, anesthesia, and radiology at all hours of the day and night. In addition to providing these life-saving therapies, the facility must have a library and access to advanced veterinary textbooks and journals, and demonstrate a willingness to make advanced training and communication a priority. Unless the facility meets a very high standard of care for their patients, the facility cannot be certified to train residents in emergency and critical care.



Dr. Ashbaugh observing an ultrasound with Dr. Bowlus.

The emergency and critical care residency consists of rotations in emergency and critical care, surgery, neurology, oncology, pathology, internal medicine, cardiology, and anesthesia. The resident also must demonstrate a proficiency in teaching both technicians and other veterinarians in a classroom and laboratory setting, and attend at least 50 hours of continuing education that have been ap-



Dr. Meola with a patient.

proved by state- and national veterinary medical associations, and 200 hours of in-house lectures and meetings. Finally, the resident must demonstrate the ability to research, write, and then publish a manuscript in a peer-reviewed veterinary journal. Only after all of these criteria have been completed can the resident sit for the specialty board examination. At this time, even the most highly trained residents only pass the certifying examination about 50% of the time on their first try. Currently there are only five board-certified emergency and critical care specialists in Colorado and about 250 in the world.

Wheat Ridge Animal Hospital is proud to have two of our former interns, Dr. Elizabeth Ashbaugh, and Dr. Stacy Meola as our two residents in emergency and critical care. Between them, they bring eight years of veterinary experience, and a wealth of knowledge and expertise. Drs. Ashbaugh and Meola are already well-respected in our veterinary community. Their dedication and compassion are unsurpassed. With the addition of residents and Dr. Katie Tucker-Mohl to our emergency team, our emergency service is unique in that a seasoned, experienced veterinary professional is in house or on call at all times to aid in making a diagnosis, treating, and caring for your patients, 24 hours a day, 7 days a week, 365 days a year.



Announcements

Boulder Luncheons

With our expanded coverage at our Boulder location, we have added to our Boulder luncheon schedule and we have a new and exciting venue. *Laudisio*, located across the street from our location, will be hosting our luncheons on a monthly basis. They offer a wonderful seasonal menu and we are excited to host two of our specialists every month for 1.5 continuing education credit hours. The remaining dates for 2009 are:

Thursday, August 6
Monday, September 14
Friday, October 9
Thursday, November 5
Thursday, December 10
(Invitations to follow.)

Please RSVP to ntorling@wrah.com or call our RSVP hotline at 303-996-1383. We hope you can join us!

Save The Date

Please also put our Continuing Education Series at the Arvada Center for the Performing Arts, happening this fall, on your calendar. The date is Wednesday, October 14.

Referral Forms

Should you be out of referral forms when you need to refer a patient we have the form available on our website. Please visit www.wheatridgeanimal.com and look under "For Veterinarians" on the gray bar on the left. Click on referral forms and you can download a pdf of the form. If you need printed copies we are happy to mail those to you. Please contact Nadja Torling at 303-996-1384 or send an email to ntorling@wrah.com.

Pfizer Roundtable Luncheons

We are excited to announce that we are joining forces with Pfizer to bring you roundtable luncheons. One of our specialists will visit your clinic and give a presentation on a topic of interest to you for 1.5 continuing education credit hours. Some examples include *Allergies and Otitis*, *Anesthesia in Critically Ill Patients* and *Proteinuria in Cats & Dogs*. If you have a specific topic you'd like us to present to you, just let us know. Pfizer will provide lunch. Please contact Nadja Torling to schedule a time (see above for contact information).

