

# Central Connection

Your Connection to Valley Central - SUMMER 2011



## Leaders in Specialty Care

Greetings to you all:

As the trees and flowers are blooming, we are continuing our green mission. VCVRC will continue to enhance our partnering efforts and communications with our referring practices during our green process.

In this second quarterly issue of CENTRAL CONNECTION, we have included articles written by Susan Bulanda, Drs. Ezra Steinberg, Dr. Ronald Hodges, Dr. Salvador Galindo, and Veterinary Nurse, Tiffany Hoshino. Our newsletter will keep you updated on medical topics and new services being offered at VCVRC as a part of our ongoing commitment to our clients and the veterinary community. The doctors and staff at Valley Central want to thank you for your sustained and continued support. Our goal is to provide the highest standard of veterinary care for your clients. We understand that our success as a referral center is directly linked to your confidence in our veterinary service for your clients and patients. Please do not hesitate to contact any doctor or staff member with any questions or concerns regarding any aspect of our veterinary hospital services.

Allyson Tolliver, Hospital Administrator

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### News and Celebrations at VCVRC:

Our surgical department is very pleased to announce that Dr. Ezra Steinberg is now a board certified veterinary surgeon. Dr. Steinberg's professional interests include minimally invasive surgery such as laparoscopy, thoracoscopy, and arthroscopy.

We are happy to announce we will be offering a free pet loss support group for clients, both yours and ours. The group is for clients that have lost or are anticipating the loss of a beloved pet. The group will be encouraged to acknowledge their feelings of pain and loss under the guidance of an experienced and professional grief counselor. Our goal is to provide help and support to clients during the extremely difficult time of pet loss. The support group meets the first Monday of every month from 6:00pm-7:00pm at VCVRC. Do not hesitate to call 610-435-1553 and RSVP in advance.

We are also very pleased to announce Dr. Lee Simpson has joined Valley Central Veterinary Referral Center (VCVRC). Dr. Simpson began to study acupuncture and Chinese medicine in Houston, Texas. She earned certification in veterinary acupuncture by the International Veterinary Acupuncture Society in 1996. In 1997, she took a veterinary chiropractic course and became certified in animal adjusting (animal chiropractic) by the American Veterinary Chiropractic Association.

In recent months, Dr. Simpson has attended courses in food therapy and advanced acupuncture at the Chi Institute for TCVM in Florida.

Dr. Simpson's professional interest in alternative veterinary medicine started 15 years ago when she felt limited in treating chronically ill patients with conventional veterinary medicine. Her natural and complementary therapies include, herbal medicine, acupuncture, electroacupuncture, nutritional counseling for homemade diets, animal adjustments (animal chiropractic), and many types of supplements.

Dr. Lee Simpson's schedule consists of seeing appointments twice monthly. To refer a patient to Dr. Simpson please have your client(s) call 610-435-1553.

We are excited about our recent partnership with The Venel Institute. The Institute is a brand new state-of-the-art anatomical research and medical training facility in Bethlehem, Pa. It is the brainchild of Dr. Steve Brigido, a foot and ankle surgeon at St. Lukes Hospital, Bethlehem. Valley Central will be partnering with the Institute for veterinary minimally invasive training (arthroscopic & laparoscopic) with Covidien. The equipment has been graciously donated by Olympus, our local leader in minimally invasive procedures.

VCVRC  
210 Fullerton Avenue  
Whitehall, PA 18052  
Phone 610-435-1553  
Fax 610-435-6378  
www.vcvrc.com



## The Joys of Springtime

By Susan Bulanda, M.A.  
Certified Animal Behavior Consultant

Many people long for the sweet, warm air of spring; daffodils blooming, birds singing and the renewed life of nature. The activity of nature is also very appealing to dogs. This is the time of the year when they love to dig. They will dig anywhere, in nice loamy soil, or even a messy mud puddle!

Why do dogs like to dig in the spring? To understand this you have to consider that dogs have a very keen sense of hearing and smell. They can detect an odor that is diluted to one part per trillion. This equals about one drop of scent from an eye dropper, spread over the entire city of Philadelphia and the dog can detect the odor to up to 300 feet in the air, throughout the city.

In the spring all of the scents that have been frozen above and in the ground are released. These scents are not limited to, but include the droppings from all wildlife, the

trapped scent from rodents and small animals that is released through the porous soil, the scent of the active bugs as well as the growth hormones released from plants that are springing to life.

Not only can dogs detect all of these delectable scents, but they can hear the movement of everything that lives in the soil. A combination that is very hard to resist.

Although dogs have a delightful time digging, you should be careful that they do not ingest the feces of wild animals, which includes feral cats that will infest dogs with parasites. To help prevent infestation, be sure to recommend monthly heartworm medicine and flea and tick preventative for your clients.

When it comes to bathing that dirty dog after digging, recommend a shampoo that avoids drying their coat or irritating their skin.

Advise the client to squeeze a 1/8" of petroleum jelly in each eye to prevent eye irritation from the soap. Begin the bath by washing the dog from the head and work down to the tail, using a rag or sponge for the face. If the dog has fleas, they will be forced to the back of the dog and off of the dog's body.

The best thing to do with a dog who loves to dig, is to give him his own "sand box" to dig in. With a little bit of training he will learn to dig in his designated spot. This will go a long way to save gardens.

With a little bit of care and consideration you can keep them clean and pest free in the spring.

## NUCLEAR MEDICINE

By Tiffany Hoshino, C.V.T.

### Radioactive I-131: The Alternative Treatment for Hyperthyroidism in Cats

#### Requirements:

CBC, chemistry, electrolytes, two radiographs of thorax, and a urinalysis (all performed prior to treatment).

Patients on thyroid supplementation are required to stop medication four days prior to the scheduled appointment. Patients are released after 72 hours post treatment in the hospital. They go home with a four week quarantine period. This treatment has a 96% cure rate.

#### Quarantine Period:

Includes no contact with anyone who is pregnant or under the age of 16. Soiled litter must be contained for a total of four weeks before disposal into a regular waste container. Owners are required to maintain a three foot minimum from the patient for four weeks and to wear protective gloves when contact is necessary.

#### Recheck Examination:

Patient should have a T4 recheck and/or a renal profile three weeks after treatment.

For further information or questions contact Tiffany Hoshino, C.V.T. at Valley Central Veterinary Referral Center (610-435-1553).



## INTERNAL MEDICINE UPDATE

By Ron Hodges, D.V.M., P.C., D.A.C.V.I.M.

### A New Endocrine Condition is in Town: Atypical Cushing's Disease

One of the most common endocrine diseases veterinary practitioners are constantly faced and challenged with has been canine Cushing's disease or hyperadrenocorticism. Cushing's disease is characterized by the excessive secretion of cortisol by the adrenal glands, and is caused by both pituitary hyperadrenocorticism and adrenal tumors.

As practitioners, we navigate our way through many twist and turns involving the clinical world every day. We've all been presented with interpreting the clients' dog, with results that showed the elevated liver enzyme, ALP. Our clinical suspicion of Cushing's disease is made a little easier when the patient exhibits clinical signs which represent the hall mark of Cushing's disease, i.e. polyuria/polydipsia, excess panting, pot belly appearance, thinning skin or alopecia.

However, on the opposite side of the fence is the patient with elevated liver enzymes, whether ALP and/or ALT and lack of clinical signs highly suggesting active Cushing's disease. Our challenge as practitioners is proving to both the owner and ourselves that the patient with an elevated liver enzyme (ALP), absence or devoid of clinical signs suggesting Cushing's disease and normal screen test, i.e. ACTH stimulation test and low dose Dexamethasone suppression test (LDDST) may have atypical Cushing's disease.

The first step in bridging the gap in patients that may have atypical Cushing's disease is to identify elevated liver enzyme(s) ALP and/or ALT. The follow-up tests should then include abdominal ultrasound to exam the liver size, shape, echogenicity and determine adrenal gland size. Most often the abdominal sonogram findings in my patients with atypical

Cushing's disease demonstrates hyperechoic hepatomegaly and normal adrenal gland size.

The most vital ancillary test when attempting to document atypical Cushing's disease is called the adrenal panel. The adrenal panel test includes a combination of the ACTH stimulation test and several common sex hormones (estrogen, testosterone, progesterone, 17-OH progesterone). The adrenal panel test is performed by initiating the ACTH stimulation test. The interpretation of the results from the adrenal panel will include both pre and post cortisol and hormonal blood levels.

The pre and/or post blood level sex hormones are most often elevated in patients with atypical Cushing's disease, which is the key to a successful diagnosis. Both baseline and post cortisol levels are generally normal in patients with atypical Cushing's disease.

The 17-OH progesterone is the most important sex hormone used to uncover or unmask atypical Cushing's disease. Both pre and post 17-OH progesterone alone can be used to diagnose atypical Cushing's disease. This hormone is also the icing on the cake when it comes to selecting medical therapy in patients with both Cushing's disease and atypical Cushing's disease. Lysodren becomes the drug of choice in Cushingoid patients with elevated 17-OH progesterone. Regulating TRILOSTANE has been documented to physiologically elevate 17-OH progesterone blood levels, thus regulating treatment of Cushing's disease very difficult.

Once the elevated sex hormones confirm the suspected atypical Cushing's disease, treatment will include the administration of both Melatonin and Flax Hulls with lignans.

The combination of melatonin and Flax Hulls with lignans helps regulate the atypical Cushing's disease by reducing the elevated sex hormones. The Flax Hulls contain the highest percentage of lignans needed to lower the elevated sex hormones. Clinically, the lower sex hormones and thus clinical improvement can take several weeks to months. There are web sites available to your clients to purchase and obtain the Flax Hulls with lignans. Melatonin can be easily purchased by clients from any health food store. The Melatonin should however be composed of a quality brand.

Follow-up or repeated pre and post sex hormone blood levels to evaluate the efficacy of both Melatonin and Flax Hulls should be repeated 4 months post administration of these products.

I know that the clinical practitioner will agree how difficult our lives have been with regarding to proving any clinical condition that does not clinically read the proverbial text book. The owner only wants to see the light at the end of the tunnel with their pet ultimately improving clinically.

Recognizing atypical Cushing's disease is one step toward helping the practitioner sleep better at night because we were able to solve the puzzle and thus improve both the clinical and laboratory signs of (atypical) Cushing's disease.

References are available upon request.



By Ezra Steinberg, V.M.D., D.A.C.V.S.

# Tibial Tuberosity Advancement (TTA) for Treatment of Cranial Cruciate Ligament Rupture

Cranial cruciate ligament rupture is the number one cause of hind limb lameness in dogs. The pathogenesis is due to a degenerative process in most cases, with traumatic tears being rare. Other concurrent injuries seen along with cruciate disease include patella luxations, meniscal tears, collateral ligament tears, and variable degrees of degenerative joint disease (arthritis). The presentation of cases with cruciate injury is variable, ranging from mild intermittent lameness caused by a chronic partial tear to nonweightbearing lamenesses with multi-ligamentous injury from motor vehicle accidents. Regardless of the cause and duration of lameness, surgical management is recommended in most cases.

At Valley Central Veterinary Referral Center, we have started to perform Tibial Tuberosity Advancement (TTA) for treatment of cruciate injury. This procedure was invented in Zurich in 2002 and has been rapidly growing in popularity. It was originally adapted from a human surgery called the Maquet procedure for treatment of subpatellar pain.

The TTA attempts to neutralize the abnormal forces in the cranial cruciate ligament deficient stifle by advancing the tibial tuberosity cranially and therefore, changing the angle between the patellar tendon and the tibial plateau slope to the perpendicular. The TTA is practiced worldwide by over 1000 surgeons and has been performed in over 100,000 cases.

Routine surgeries involve first exploring the stifle joint by either arthrotomy or arthroscopy. Normal evaluation of both cruciate ligaments, menisci, and arthritis, and synovitis is performed. Preoperative radiographs taken with the stifle in 135 degrees of extension with a calibration marker are used to measure the size of the implants to be used. The implants are made out of titanium which has been shown to be more biocompatible than surgical grade stainless steel. A tibial tuberosity osteotomy parallel to the frontal plane is then made using a sagittal saw. The predetermined cage, plate, fork, and screws are then implanted to eliminate tibial thrust. Postoperative radiographs are performed to evaluate the positioning of the implants.

As with the TPLO, anecdotal reports indicate that animals are faster to bear weight on the leg than with the extracapsular technique. Patients are given strict exercise restriction orders until a bony union is documented on recheck radiographs. Unlimited walking under leash control is usually started at 6 weeks

postoperatively and return to normal activity begins 3-4 months after surgery. As with most orthopedic procedures, professional physical therapy is encouraged.

We have had very good success with this procedure. We are strict with our selection criteria to make sure that the patient is a good candidate for TTA. This involves routine orthopedic examination, chronicity of the injury, age of the animal, shape of the tibia as seen on radiographs, any angular malalignment, and degree of tibial slope.





By Salvador Galindo, D.V.M.

### Minimally invasive procedures (MIP) have a number of benefits. These two cases highlight a few:

“Abbie” is a 1 y.o., female, Doberman that was diagnosed with VonWillebrands disease post ear cropping complications. Her owners wanted her spayed but were concerned about an open procedure and excessive bleeding. With personal experiences with MIP, “Abbie”’s owners wanted the same for their dog. She was referred for a laparoscopic spay. The smaller incisions, which lead to minimal bleeding, was preferred in “Abbie.”

Prior to the procedure, “Abbie” was given cryoprecipitate administered at 1 ml/kg over 1 hour. Through two 10mm incisions the laparoscopic ovariohysterectomy was performed. (Fig 1). Exploratory of the abdomen showed no bleeding (Fig 2). “Abbie” recovered uneventfully and was discharged the following day.

The advantages of laparoscopy are a faster recovery, smaller incisions, and less pain. This was documented in a Veterinary Surgery article that showed 65% less pain and faster recovery as compared to median celiotomy.

“Toby” is a 9 y.o., M/N, boxer. His owner is Dr. Kirsten Reis from Wrights AH. “Toby” had a history of right hindlimb lameness 2 years ago that responded medically. He was diagnosed with bilateral hip dysplasia at that time. His current history dates back to 3 months ago when the right hindlimb lameness returned. Musculoskeletal exam showed no hip pain or drawer in the stifle, and adequate muscle mass. He did not respond to physical or medical therapy. An MRI revealed a lateral collateral ligament tear in the right stifle. An ACL tear was suspected, however; the ACL was recorded as being intact on the MRI. Dr. Reis inquired about the possibility of arthroscopy to evaluate the ACL and the meniscus. “Toby” was admitted for arthroscopy and Dr. Reis assisted with the procedure.

Arthroscopic exam revealed a partially torn ACL (Note torn fibers Fig 3) with a normal meniscus. A pre-op tibial plateau angle of 28 degrees was measured and a TPLO procedure was performed.

This case highlights the diagnostic benefits of MIP. Without this procedure “Toby” may have continued with a right hindlimb lameness, poor muscle tone, and a partial ACL tear leading to progressive osteoarthritis. He is well on his way to recovery with physical therapy. To date this is our fifth case that we have seen in 6 months where arthroscopy was used to diagnose a partial ACL tear in a dog with a stable stifle and minimal to no joint effusion or muscle atrophy. Both procedures were performed by Dr. Galindo. We encourage you to call for an in-house CE day to observe and participate in a MIP. Please call any of the surgeons with any questions as to how MIP can benefit your own or your client’s animals.

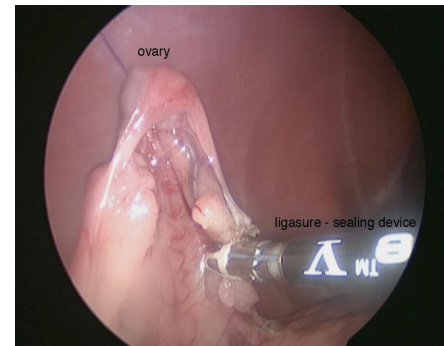


Fig. 1

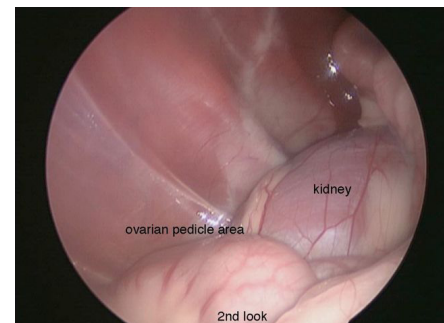


Fig. 2



Fig. 3



# VALLEY CENTRAL

VETERINARY REFERRAL CENTER

210 Fullerton Avenue  
Whitehall, PA 18052

VCVRC has been serving the Lehigh Valley and surrounding areas since 1996.  
We are dedicated to providing state-of-the-art veterinary care for your patients.

## Specialists at Valley Central Veterinary Referral Center

### SURGERY

Carlos Hodges, D.V.M., M.S., P.C.

*Practice Limited to Surgery*

Salvador Galindo, D.V.M.

*Practice Limited to Surgery*

Ezra Steinberg, V.M.D., D.A.C.V.S.

### INTERNAL MEDICINE

Ronald Hodges, D.V.M., P.C., D.A.C.V.I.M.

Candace Carter, D.V.M., Ph.D., D.A.C.V.I.M.

### OPHTHALMOLOGY

Robert Peiffer, D.V.M., Ph.D., D.A.C.V.O.

Mary Landis, V.M.D., M.A.

*Practice limited to Ophthalmology*

### CARDIOLOGY

Dennis Burkett, V.M.D., Ph.D., D.A.C.V.E.C.C., D.A.C.V.I.M.

Ellen Davison, V.M.D., D.A.C.V.I.M.

### NUCLEAR MEDICINE

Ronald Hodges, D.V.M., P.C., D.A.C.V.I.M.

### BEHAVIOR

Susan Bulanda, M.A.

Certified Animal Behavior Consultant

### ACUPUNCTURE

LEE SIMPSON, D.V.M., C.V.A., C.V.C.

### Continuing Education Schedule

#### Monthly Case Conferences:

The last Thursday of the Month from 12 PM-1 PM. For your convenience we are now offering monthly case meetings thru web conferencing. For more details please call the office.

Discussions about clinical cases with medicine and surgical implications.

Lunch will be provided, courtesy of Hills, by Dr. Heather Berst.

Until our new web-site is launched, please refer to our Facebook page for updates to our CE schedule.

You may also email Dr. Carlos at [Carlos@vcvrh.com](mailto:Carlos@vcvrh.com) with any questions about upcoming lectures.

