

Newsletter of the COMMUNITY PRACTICE SERVICE

College of Veterinary Medicine, Washington State University
www.vetmed.wsu.edu/ClientED/community_practice.asp

Spring 2007

WSU adds eye care to its list of specialties

Ophthalmology is the newest specialty returning to the repertoire of services offered by WSU's Veterinary Teaching Hospital. In July, WSU teamed up with Spokane veterinary ophthalmologist **Dr. Bill Yakely** to form a combined residency program. The goal is to treat animals with eye problems and train veterinarians seeking board-certification as eye care specialists.

The ophthalmology team at WSU consists of Dr. Yakely, a board-certified ophthalmologist for 31 years who runs the Animal Eye Clinic in Spokane, and ophthalmology resident **Dr. Terri**

Schneider, a WSU clinical assistant professor. At present, WSU offers the only specialty ophthalmology service for animals in the Palouse area. Currently, ophthalmology services are offered at WSU on a limited basis with anticipation of an expanded schedule in the future.

"Our goal is to increase WSU veterinary students' awareness of animal eye diseases, and to diagnose and care for animals that have them," Dr. Yakely said. "We also think it will be very useful to have Dr. Schneider board-certified in ophthalmology to help clients and serve the needs of the community."

"We treat all species of animals, including horses, dogs, cats, alpacas, birds, and geckos," Dr. Schneider said. "Animals can be seen by referral or by simple owner scheduling, too."

"Typically, the cases we see are referred by veterinarians because of a failure to respond to treatment or the animals have complicated ocular problems. Patients with cataracts are also referred for surgery. Many times, veterinary practitioners refer eye problems because certain conditions can deteriorate rapidly and the eye is not very forgiving."

Commonly seen eye problems that necessitate specialist care in dogs and cats include non-healing corneal ulcers, deep ulcers, traumatic injuries, perforations, and an inflammatory disease of the eye called uveitis.

"Some problems are curable, and others such as uveitis need to be managed and controlled to keep the animal's vision," Dr. Schneider said. "Even



Otis

if the animal can't see, there are ways to make the animal more comfortable. People need to know if their pet's condition is treatable or not, and sometimes owners just need an explanation for what is going on. From there, we can help with the best treatment for that animal."

Many conditions like chronic eye ulcers can be treated medically. Surgery can also be performed for traumatic injuries, cataracts, and other qualifying conditions. Some animals that come to WSU, such as horses with cancers in and around the eye, are handled in a team fashion

with the equine medicine and surgery service, and oncology service.

"WSU is a great place for us to treat animals because of the combined services offered here and the equipment that is available," Dr. Schneider said.

"The demand for ophthalmology services is high," she said. "Our caseload is very full, both in Spokane's Animal Eye Clinic and at the WSU Veterinary Teaching Hospital."

"Most ophthalmologists are located in big cities, and because there are so few board-certified veterinary ophthalmologists, many universities that have them are losing them to private practices," she said. "WSU is trying to overcome that problem through this program."

In addition to providing more specialized care for clients, the goal of training WSU veterinary students was also a large motivating factor in implementing the program.

"For the past two years that I was in the Community Practice, the students really wanted to be involved with ophthalmology cases," Dr. Schneider said. "The feedback I got from students was that they were so grateful to help with eye care cases and that it was a real asset to their education. The clients always say thank you too. They know how hard it is to get specialty eye care."

For more information about ophthalmology care for your pet or to make an appointment, contact the WSU Veterinary Teaching Hospital at 509-335-0711 or the Animal Eye Clinic of Spokane at 509-535-9394. **Eye Clinic July 2011**

509-368-6800

Matthew Mickas, DVM
Raelynn Farnsworth, DVM
Nickol Finch, DVM
Tami Montgomery, RVT
Melody Gerber, RVT

To make an appointment call:
509-335-0711



In this issue:

WSU adds eye care to its list of specialties.....	1
Back pain and disk disease in Dachshunds.....	2
Physical therapy program offered at WSU	3
Rescue dog gets lifesaving treatment at WSU	4
Pet Loss Hotline	4
Why does my pet have stains beneath its eyes?.....	5
Early spring pet tips.....	6

Community Practice Service is published four times a year by Washington State University, PO Box 645910, Pullman, Washington 99164-5910. Issue No. 9. Phone: 509-335-0738. To subscribe, contact Emmy Widman at esunleaf@vetmed.wsu.edu or 509-335-5389. 02/07 117077.

WASHINGTON STATE
UNIVERSITY

World Class. Face to Face.

Back Pain and Disk Disease in Dachshunds



A group of Dachshunds treated for intervertebral disk disease at WSU within the same week, some with medical management and some with surgery.

It can happen to any dog, but intervertebral disk disease is an especially common problem for many dachshund dogs.

"Dogs that are predisposed to this disease are the chondrodystrophic or dwarf breeds like dachshunds, bassets, and corgis," said **Dr. Annie Chen**, a WSU clinical instructor and board-eligible veterinary neurologist. "The problem dachshunds have is that often the disks in their back age prematurely. A dog as young as two years old may have remarkably degenerative disks. These disks can extrude or rupture into the spinal canal, or they can bulge or protrude into the spinal cord."

When these disk protrusions or extrusions occur, they can compress the spinal cord and surrounding nerve roots. This creates pain and often causes inflammation and a lack of blood supply to the spinal cord, which can result in neurologic dysfunction.

"In dachshunds in particular, when the disk degenerates, the center of the disk becomes calcified or bone-like, instead of being in a normal gelatinous state that absorbs shock as the dog moves," Dr. Chen said. "Because the disk becomes so hard and does not absorb shock well, it is easy for the center or the nucleus pulposus of the disk to rupture into the spinal canal and create spinal cord compression from activities like running or jumping."

With a disk bulge or protrusion, the annulus fibrosus or the outer part of the disk degenerates and gets bigger. This causes compression on the spinal cord and creates similar clinical signs as extrusions, which range from pain to wobbliness in gait, dragging of certain limbs, and eventually paralysis.

"The worst case scenario is when a dog becomes paralyzed and loses its ability to sense deep pain," Dr. Chen said. "Once deep pain sensation is lost, prognosis for recovery becomes worse, and surgery needs to be done as soon as possible."

In the past, dogs with intervertebral disk disease were diagnosed using images generated by x-rays and a special dye injected into the spinal canal, called myelography. Currently, animals that come to the WSU Veterinary Teaching Hospital are diagnosed with magnetic resonance imaging or MRI.

"Today, MRI is considered the gold standard in diagnostics," Dr. Chen said. "The MRI gives us the ability to evaluate each disk, look for disk material and hemorrhage in the spinal canal, and view the integrity of the spinal cord and nerve root to really localize where the problem is. Once we identify the problem, we

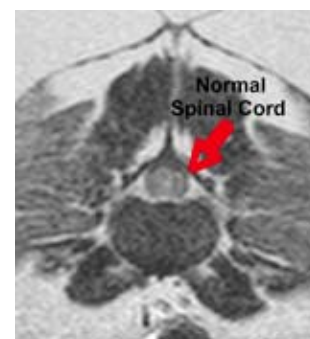
can decide whether surgery is an option and determine which type of surgical procedure to perform."

Surgery is not always necessary for dogs with disk disease. It is usually dependent on the severity of the clinical signs and whether or not the animal responds to medical management.

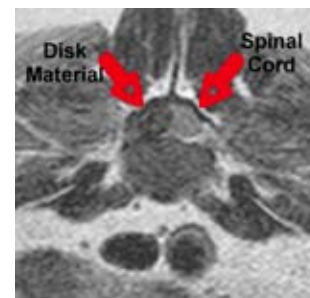
"Medical management usually consists of confinement in a cage or pet crate for a minimum of six weeks with minimal movement," Dr. Chen said. "Pain medication and anti-inflammatory drugs may also be used to control pain. Most dogs tolerate the confinement well as long as the owner stays involved with the pet's day to day care, such as changing its position every four to six hours, taking it outside to go to the bathroom, and performing physical therapy exercises. Most cases also go through a physical therapy program offered at WSU's Veterinary Teaching Hospital.

"Surprisingly, some animals recover very well with medical management alone. If surgery is necessary and the patient has deep pain sensation, these dogs still have an excellent chance of recovery."

Currently, WSU is the only veterinary hospital in the region that offers neurosurgery with board-certified neurologists outside of Seattle and Portland. The WSU neurology service treats many dogs with intervertebral disk disease, including local clients and referrals from across Washington, Idaho, Montana, and Alaska.



MRI image of normal spinal cord, which is circular in shape.



MRI image of extruded disk material (black in color, on the left side) causing compression on the spinal cord and displacing the spinal cord to the opposite side.

continued on page 5

Physical therapy program offered at WSU



Lori Lutskas works with a Dachshund recovering from surgery

For post-surgical patients, physical therapy is often an important and essential part of the recovery process. Over the past year, WSU has implemented a physical therapy program at the Veterinary Teaching Hospital designed specifically to help dogs in need.

“With rehabilitation, our goal is to reduce recovery time, decrease pain, increase mobility, and prolong life,” said **Lori Lutskas**, a certified canine rehabilitation practitioner and neurology veterinary technician who is in charge of the program.

Currently the service specializes in providing manual therapy that consists of passive range of motion, weight-bearing, electrical stimulation, and therapeutic exercises. Electrical stimulation is used to contract a patient’s muscles by stimulating motor points and muscle bellies to build muscle tissue and/or delay muscle atrophy, depending on the individual.

“I also develop home-care programs for the clients,” Lutskas said. “In the future, the hospital is planning on having an underwater treadmill and swimming facility. We are still purchasing equipment and asking for donations for some of the large pieces of equipment.”

Those needs include the underwater treadmill and a therapeutic ultrasound machine.

Therapeutic ultrasound uses high-frequency sound waves to heat tissues up to 5 cm deep, increase blood flow into an area, and decrease muscle spasms. Therapeutic ultrasound is being researched for repairing damaged tissue and decreasing healing time for animals with soft tissue or musculoskeletal injuries.

An underwater treadmill helps animals by providing buoyancy for partial weight bearing, it provides balance and helps animals walk in a normal gait position, and it provides water resistance to increase muscle forces. Warm or cold water can be used depending upon a patient’s needs.

“Patients that would benefit the most from an underwater treadmill are orthopedic patients before and after surgery, patients with neurological problems, and dogs that need conditioning,” Lutskas said.

Many of the patients she sees are referred from several primary services in the college including the orthopedic, neurology, and Community Practice services. She also receives referrals from private practitioners. Lutskas works under the direct supervision of the primary veterinarians involved in her cases, and also is aided by fourth-year veterinary students that rotate through the neurology and orthopedic services.

Typically, the physical therapy service treats animals such as neurology patients recovering from intervertebral disk disease. “These dogs are trained to walk again, and we work on increasing their balance and steadiness,” Lutskas said. “Orthopedic patients often need post-operative help in recovering from knee ligament injuries and fractures, and we also treat non-surgical patients, such as overweight dogs, arthritic dogs, or those with other chronic conditions.

“Overall, the treatments have been very successful,” she said. “Sometimes there may be an underlying condition that needs to be addressed by one of the primary services before rehabilitation can be successful, but I would say that we experience a 90 percent success rate for the expected return to function with our patients. It can be compared to people who go to physical therapy after surgery or for help with other conditions. We can do the same for canine patients and get similar results.”

Generally, local patients receive outpatient treatments about three times a week for two to three weeks. Pets are then reassessed to see if they can continue with at-home exercises, or if more in-house therapy is required. Some animals may require weekly or bi-weekly in-house treatments to maintain condition. Animals that travel from western Washington or out-of-state are housed at the WSU Veterinary Teaching Hospital for a week or more after surgery and receive treatments throughout their stay.

“We are getting more and more calls as people realize we offer a service here,” Lutskas said. “Other canine physical therapy services I have been in contact with are also in high demand. There are some in Spokane, Seattle, and Boise, but our service is the most convenient for clients in the Palouse area.”

For more information about the WSU physical therapy program or to schedule an appointment, contact the WSU Veterinary Teaching Hospital at 509-335-0711. To make a donation to the physical therapy program, contact Andrea Farmer, assistant director of veterinary development, at 509-335-9515.

Endangered species rescue dog gets lifesaving treatment at WSU

Finny, a 10-year-old black Labrador retriever, has a gift—the ability to seek out rare and endangered species without causing them harm.

He has a skill that has taken him from California's Mojave Desert, searching for rare desert tortoises, to South Dakota to look for black-footed ferrets. But Finny suddenly began having seizures.

A trip to his veterinarian in Missoula, Montana, confirmed an unfortunate reality. It appeared Finny had a hemangioma, or tumor made up of blood vessels, in the frontal lobe of his brain. The recommended treatment was a series of radiation treatments available at WSU's College of Veterinary Medicine.

"It's been hard," said Finny's owner, Aimee Hurt. "He has battled cancer before, with a lymphatic sarcoma. We had that removed surgically and he's been great. That is until now."

For more than three weeks, Finny came to WSU nearly every day for specialized treatment from the College of Veterinary Medicine's linear accelerator. The linear accelerator is a cancer therapy machine that produces a targeted beam of radiation. The directed energy is used to attack the tumor repeatedly while limiting the damage to surrounding tissue.

"Everything went really well, and his prognosis is good," said **Dr. Janean Fidel**, a WSU veterinary oncologist. "We often see in these cases an animal's life extended two to three years."

After the treatment, Finny's owner hoped to have him back out in the field at work within weeks. Next stop, the Centennial Mountains of eastern Idaho and southern Montana, to look for scat from grizzly and black bears, wolves and cougars as part of the Wildlife Conservation Society's Carnivore Connectivity Project. Then, back to the desert to continue to look for rare tortoises.

"There is a growing demand for dogs like Finny," Hurt says. "It's an up-and-coming research tool, because it's a non-intrusive way to go out and detect these animals without disturbing them."



Finny on the job

WSU Pet Loss Hotline

Pets play an important role in our lives. These special animals are truly dear friends and loyal companions who provide unconditional love to caring owners. In many situations, they are dearly loved members of our families. As such, when a pet dies, the loss can be overwhelming and the void created by their loss often runs deep within us.

Sometimes, the grief can be too overwhelming for a person to bear alone. If you have lost a pet and feel this way, **you don't have to be alone**. The WSU College of Veterinary Medicine has a **Pet Loss Hotline** for anyone to call who may need help coping with grief. Our volunteers offer compassion and understanding, and are there to help during this painful time. We hope that by calling the hotline from the privacy of home, mourning pet owners will be able to release some of their grief and start the healing process.

Our volunteers are veterinary students who attend the WSU College of Veterinary Medicine and have been trained in grief counseling by a licensed psychologist. Many volunteers have experienced the loss of a beloved pet. They can help with questions such as:

- When is it time to say goodbye?
- When will I stop grieving?
- How do I explain this to my child?
- Should I get another pet, and if so, how long should I wait?

They can also recommend helpful books on grief management for adults and children. Another option is to e-mail any questions or concerns to our volunteers at plhl@vetmed.wsu.edu.

Pets can also be memorialized through the WSU Pet Loss Hotline. Write to us about your pet and we will post your story for others to read at www.vetmed.wsu.edu/plhl/stories/index.asp. Send us an electronic version of any type of story about your pet, such as a poem or just some of the favorite things they liked to do. Digital pictures can also be sent along with your story for other people to see.

Send stories and pictures to us at: Pet Loss Hotline, Washington State University, College of Veterinary Medicine, PO Box 647060, Pullman, WA 99164-7060

E-mail us at: plhl@vetmed.wsu.edu or call us at 509-335-5704.

The Pet Loss Hotline hours are Monday through Thursday from 6:00 to 9:00 p.m., and Saturday from 1:00 to 3:00 p.m. More information about this service can be found online at www.vetmed.wsu.edu/PLHL/home.

WSU Pet Loss Hotline – 509-335-5704

Monday to Thursday from 6:00 to 9:00 p.m. PST

Saturday 1:00 to 3:00 p.m. PST

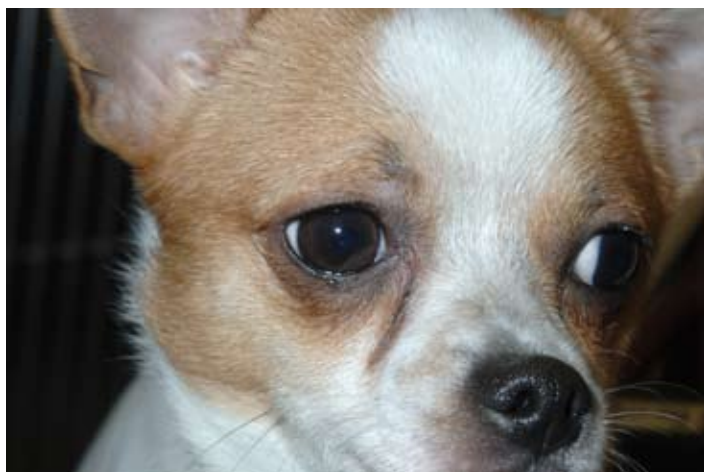
plhl@vetmed.wsu.edu

www.vetmed.wsu.edu/PLHL/home/

Why does my pet have stains beneath its eyes?

Many light-colored pets have brown or pinkish stains on the skin and hair below the corner of their eyes. Generally, the staining is a cosmetic issue due to tears spilling on the face, and is not a diagnosis or symptom of any specific health problem. These stains are caused from a normal pigment in tears that can tint light-colored hair.

There are many reasons that tearstains appear on the face, some of which require medical attention. One possibility includes pain or allergies that cause excessive tearing that spills over on the hair. Blocked tear ducts may also obstruct the normal exit of tears and makes them run down the face.

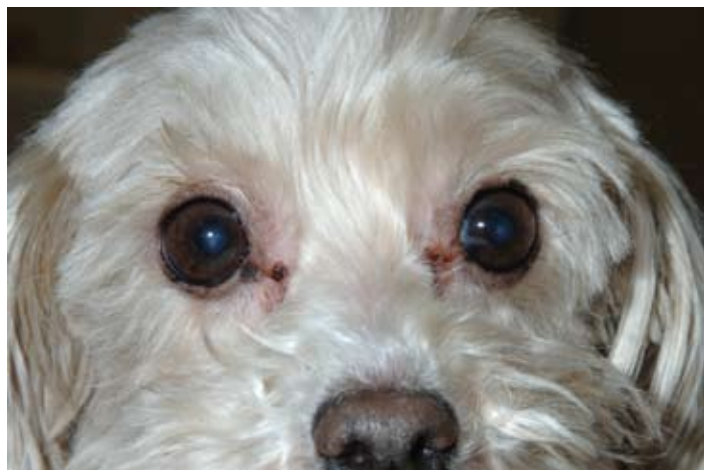


Psy

“Stains may also result from abnormal hair growth if it touches an animal’s cornea and ‘wicks’ tears away from the eye, over the lid, and often to the corner of the eye,” said **Dr. Terri Schneider**, a WSU ophthalmology resident. “This can come from hair growth in an abnormal place or misdirected normal hairs that touch the eye.”

Other causes include congenitally closed tear ducts, prominent eyes that compress the openings into the tear ducts and force tears over the lid, and poor tear quality.

“Different breeds are predisposed to this for any of these reasons,” Dr. Schneider said. “For example, Shih Tzus often have



Kelci

abnormal and excessive hair growth, miniature breeds like pugs have prominent eyes that can block the ducts, and cocker spaniels may have congenital problems, as well as abnormal hairs.”

Poodles and Persian cats also are commonly affected.

“The staining itself is mostly cosmetic, but if the face stays wet, the skin can become irritated,” she explained. “Breeds that have deep facial folds might experience corneal irritation that would cause tears to run along the folds and result in a skin infection.”

Corneal inflammations and ulcers, as well as inflammation of the duct system, can also cause excessive tearing. Both are painful conditions and a veterinarian should evaluate these problems immediately.

“Any treatment would be specific to the cause of the problem,” Dr. Schneider said. “If a general practitioner cannot identify the problem, the animal can be referred to a veterinary ophthalmologist.”

“Some people use supplements or antibiotics to reduce the pigment, but this does not eliminate the problem. It only makes the staining less conspicuous.”

For more information about tearstains or to make an appointment, contact the WSU Community Practice Service or Ophthalmology Service at 509-335-0711.

Back Pain and Disk Disease in Dachshunds *continued from page 2*

The most common site for disk problems is generally in the middle of the spine where the ribs and spine come together. Dogs that have disk disease may show signs of pain that can appear to radiate from the abdomen, yelp when picked up, or have a stiff, hunched-over appearance. Other signs include difficulty in walking, unsteadiness, dragging or walking on top of their feet, a stiff neck, or tucking a leg up to one side.

“If an animal displays any of these signs, it should be pulled out of activity immediately and should be evaluated by a veterinarian,” Dr. Chen said. “Disk disease can be very serious and neurologic dysfunction can progress rapidly. If disk disease is caught early, medical management might work.”

If the disease progresses to paralysis, surgery is often an option. “Greater than 85 percent of paralyzed dachshunds that can still

feel deep pain will regain ability to walk again after surgery,” Dr. Chen said. “But even if they get better, these dogs can still develop other disk problems down the road. Disk disease can be frustrating, but it can be very treatable, especially if it is caught early and treatment is implemented early.”

Because so many dachshunds are predisposed to disk disease, it may be impossible to prevent. But keeping a dog lean, discouraging jumping, and placing ramps to furniture or other places that might require a leap may help. It can also be helpful to use a harness rather than a collar with a leash when walking a dog to prevent neck problems.

For more information about disk disease or to schedule an appointment regarding a neurologic problem, contact the WSU neurology service at 509-335-0711.



Early Spring Pet Tips



Abigail

Dental Care

Oral care is an important part of keeping pets healthy. Annual physical examinations and regular dental cleanings by a veterinarian are important to identify and prevent dental diseases. Pet owners can also learn how to examine their pet's mouths for signs of dental problems.

To keep a pet's teeth healthy at home, owners can brush their pet's teeth, feed a dental-formulated diet, and give their pets dental chews to prevent plaque from building above the gum line. Owners can also apply OraVet Plaque Prevention Gel™, recommended by the WSU Community Practice, to help prevent plaque and tartar buildup above and below the gum line. For brushing tips and other dental care information for pets, contact the Community Practice or look online at the American Animal Hospital Association's dental care guidelines for dogs and cats at www.healthypet.com.

Holiday Plants and Food

Chocolates for Valentine's Day, St. Patrick's Day, and Easter are tasty treats for people, but not for dogs and cats. Chocolate

contains a substance called theobromine, a caffeine derivative, which can, in large doses, cause seizures and potentially kill a dog or cat. Plus, most pets don't need the calories found in chocolate. Be sure to store chocolate safely away from pets. Alcohol is also toxic for pets and should never be given to them.

Some springtime flowers and plants can be toxic to pets as well. Check with us for a list of these plants and what to do in case of poisoning. Of special note are Easter lilies, a popular indoor potted plant in the spring, that is very toxic to cats. Ingestion of Easter lily leaves can be fatal, so make sure cats do not play with them. If you suspect poisoning, contact the WSU Community Practice immediately.

If you buy treats for your family during the holidays, it may be a good idea to remember your pets too and provide a special chew toy or treats to help keep them out of plants and food and stay busy during activities such as Easter egg hunts.



Allergies

Springtime is the start of allergy season for both us and our pets. Clinical signs of allergies in pets include chewing, licking, head shaking, and scratching. If your pet is experiencing these signs, call us for an appointment.

Diseases and vaccines

Water-soaked soil and standing water are reservoirs for leptospirosis, a serious disease in dogs and people. Be sure to ask if your dog is at risk and vaccinated against the disease. Salmon poisoning is another serious and potentially fatal disease for dogs that pet owners should be aware of. It can be acquired when dogs eat raw salmon, steelhead, or trout infected with an organism that causes the disease, even if previously frozen. Freezing wild salmon, steelhead, and trout does not destroy the causative organism. Clinical signs include vomiting, diarrhea, lethargy, swollen lymph nodes, bleeding from the nose, and eventually death. Although there is no vaccine for salmon poisoning, it can be treated successfully if caught in time.