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## Services Directory:

Cardiology	(703) 669.9311
Critical Care/Emergency	(703) 777.5755
Dentistry & Oral Surgery	(571) 209.1146
Internal Medicine	(703) 777.5866
MRI/CT Imaging	(703) 669.5544
Neurology/Neurosurgery	(703) 669.2829
Oncology	(571) 439.6655
Ophthalmology	(571) 209.1190
Surgery/Rehabilitation	(703) 771.2100



165 Fort Evans Rd. NE  
Leesburg, VA 20176



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**Please join us on Tuesday, August 31, 2010  
at The LifeCentre for our next continuing  
education program.**



**Thomas P. Chamberlain, MS, DVM**

Diplomate of the American  
Veterinary Dental College

A presentation on Basic Pathophysiology of Periodontal Disease by Thomas P. Chamberlain, MS, DVM, DAVDC.

In this 50-minute session, Dr. Chamberlain of Animal Dentistry & Oral Surgery will discuss the importance of periodontal microbial ecology knowledge in understanding periodontitis as a biofilm disease. He will present an introduction to biofilm disease and the microbial aspects of periodontal biofilm communities and their influence on the development and treatment of periodontitis.



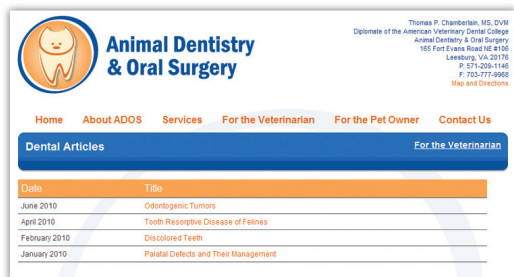
**Date:** August 31, 2010  
**Time:** 6:30 pm Meet, Greet and Eat  
**Program:** 7:00 pm - 8:00 pm  
**Place:** The LifeCentre  
165 Fort Evans Rd. NE  
Leesburg, VA 20176  
**Support:** Pfizer Animal Health  
**RSVP to:** Rory Caracciolo  
571-209-1195 or  
rcaracciolo@tlcvets.com

One hour of CE will be issued by  
the Virginia Board of Veterinary Medicine  
for courses held at TLC.

# Animal Dentistry & Oral Surgery Announces a New Monthly Newsletter

We would like to announce the addition of our new dental/oral surgery newsletter to our website! Please look us up at: [www.animaldentalspecialist.com](http://www.animaldentalspecialist.com). The dental articles can be found under the section, "For the Veterinarian." We will be publishing the articles monthly and you can subscribe by contacting us and letting us know your email address. Our website is very user friendly, with downloadable referral and client information forms. There are also excellent directions for the convenience of your clients.

Over the past year, we have expanded our staff and business hours to better accommodate our growing practice, and service our clients and patients. Animal Dentistry & Oral Surgery employs two full-time, experienced LVTs and a receptionist to service our ongoing mission, which is: *to provide the highest quality anesthetic and veterinary dental and oral surgical care to our patients, and engage in detailed, open and friendly communication with our clients and referring veterinarians.* We are very proud of our anesthetic safety, patient care and client satisfaction records.



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Map and Directions

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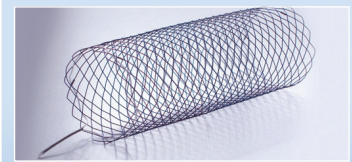
Dental Articles For the Veterinarian

Date	Title
June 2010	Odontogenic Tumors
April 2010	Tooth Resorptive Disease of Felines
February 2010	Discolored Teeth
January 2010	Palatal Defects and Their Management

At Animal Dentistry & Oral Surgery, we know that optimal pet healthcare requires a solid partnership between the family veterinarian and the specialist. We embrace this team approach because it means that the client's pet will get the most comprehensive care possible, and of course, like with humans, dental care is particularly important to their overall health.

## Update from the 2010 Veterinary Interventional Radiology Summit

Dr. Robert Justin of Leesburg Veterinary Internal Medicine is excited to share the newest technology introduced at the 2010 Veterinary Interventional Radiology Summit. The Summit was hosted by the world-renowned "Stent" team of Jeffrey Solomon, MD, Chick Weisse, VMD and Allyson Berent, VMD. The 2-day intensive seminar combined lectures with hands-on vascular and non-vascular image-guided procedures such as vascular foreign body retrieval, urethral stenting and chemoembolization. For example, the stent\* shown below is used for relief of colonic obstruction caused by a non-resectable adenocarcinoma in the feline. As always, we are continuously working to apply the most advanced techniques to give our patients healthier and longer lives. Please call us at 703-777-5866 if you would like to discuss how your patient could benefit from this technology.



\*Image courtesy of Infinitti Medical.

## Snake Envenomation – by Susan M. Barnes, DVM, Animal Emergency Critical Care

There are two major categories of venomous snakes in the United States, elapids (coral snakes), and the crotalids (pit vipers such as rattlesnakes, copperheads, and water moccasins). Coral snake venom is neurotoxic. Crotalid venom is hemotoxic, causing cytotoxicity, endothelial damage, coagulopathy and myonecrosis. All snake venom is a complex mixture of enzymes and peptides. Twenty percent of pit viper bites are "dry bites" with no venom injected; however, pathogenic bacteria and future sepsis is a concern.

**Tips:** Aggressive supportive therapies with pain management are paramount during the first 36-72 hours. Tissue edema and swelling will resolve in ~7-10 days, if sufficient supportive care is provided. Surgical debridement should be withheld until the extent of tissue necrosis can be determined. Fasciotomy to relieve pressure within swollen tissues is discouraged as progressive tissue swelling is most effectively treated with additional antivenin. Anti-inflammatory medications will not address this problem, only antivenin! Tourniquet use is contraindicated. In the event that a patient is presented with tourniquet in place, it is best to administer antivenin prior to release of the tourniquet with IV fluid resuscitation ready, if needed. Acute onset vomiting should be considered a sign of envenomation. The venom of a deceased snake may remain toxic for 3-8 hours post death. Potential snake envenomation patients should be closely observed for at least 8 hours, as clinical signs may be slow to develop.

Dogs and cats can die from hypotensive shock early post envenomation; later from multiple organ failure. If not witnessed, a diagnosis is largely presumptive, based upon history and discovery of a focal swelling region with pain or skin discoloration, particularly if presence of fang puncture wounds. Concurrent thrombocytopenia, +/- echinocytes and/or hypofibrinogenemia is highly suggestive of pit viper envenomation. Baseline clotting times/CBC/serum chemistry/electrolytes and urinalysis are suggested with ~60% of victims developing a coagulopathy.

**Treatment:** 1. **Airway and oxygen support.** 2. **IV fluid therapy**, even if patient appears cardiovascularly stable as myoglobinemia is common and potential for acute kidney injury great. Patients in pain commonly do not eat or drink, making appropriate fluid support for the first 24-48 hours post bite paramount. 3. **Antivenin** is available for use in dogs and cats. There are two types and it is not inexpensive. The earlier antivenin is given the more benefit and diminished tissue necrosis. One to two vials early is worth several vials later; the little guys need more than the big guys, which relates to the concentration of toxin/kg. Cats are treated as if medium dog sized when it comes to antivenin use. 4. **Multi-modal pain management** is a must. Use caution with NSAID therapy until cardiovascular stability and perfusion is assured, ideally with the patient eating and drinking and knowledge of a baseline creatinine. Corticosteroids are the most controversial topic in snakebite therapy. Current literature provides no evidence demonstrating benefit to humans or animals with crotalid bites. Antihistamines, though commonly used, are currently only recommended in human snakebite victims if there are signs of reaction to antivenin, at which time multi-modal histamine blockade is used +/- epinephrine with the infusion rate stopped, then slowed if the patient improves. 5. **Broad-spectrum antimicrobials** are gram-negative coverage focused.



The team at AECC is experienced in recognizing the signs and providing the appropriate treatment options for snake envenomation with antivenin. In 2010, AECC has successfully treated 5 envenomation patients. All have survived with hospital stays ranging from 1 to 9 days, with the average stay of 2 to 3 days.

For more information please contact Dr. Barnes, Medical Director, at 703-777-5755.