Pain Medicine Service at Angell-Boston

Angell Animal Medical Center-Boston recently joined a small group of veterinary schools and private referral practices that offer pain medicine services. Following the lead of human medical practices, veterinary medicine is beginning to recognize pain medicine as a separate specialty that may be more effectively treated by veterinarians who exclusively diagnose and manage pain.

Pain is one of the most common reasons that pet owners seek veterinary care and, in effect, veterinary medicine has progressed dramatically in the science and art of pain management. Advances in pain assessment, drug therapy, non-drug therapy and quality-of-life management can extend comfort and functionality, the absence of which has previously shortened the lives of many animals with chronic illness.

Angell-Boston’s new Pain Medicine Service has a multi-disciplined approach that will accept patients referred from both Angell specialists and veterinarians at other hospitals. The unrestricted access that Angell veterinarians enjoy with other specialty services within the hospital ensures that patients of the Pain Medicine Service will receive an integrated approach to their pain treatment.

Dr. Lisa Moses of the Angell-Boston Emergency and Critical Care Service leads the new Pain Medicine Service. Dr. Moses has received advanced training in both human and veterinary pain medicine. As a result of the training, the Pain Medicine Service is modeled after pain clinics created at human hospitals. Dr. Moses has also been trained and certified in veterinary medical acupuncture.

Laparoscopy

Diagnostic laparoscopy has been added to our expansive list of diagnostics offered at Angell.

Drs. Carroll and DePapp, diplomates in internal medicine, spear-headed the program one year ago which is now up and running with a steady flow of cases.

Laparoscopy involves exploring an abdomen through two or three small incisions. Telescopes and biopsy instruments are inserted through the incision to obtain samples from organs such as the liver, pancreas, kidney or small intestine. The benefits of this modality versus ultrasound are extensive. First, we are able to examine the organ with the aid of a telescope and camera, allowing real-time visualization of the area of interest on high definition video. In contrast, ultrasound allows visualization of organs in shades of grey which places us at a disadvantage when precise localization of a lesion is our intent. Second, the sample sizes obtained via laparoscopy are very large, allowing us to gather samples for biopsy, culture, heavy metal analysis and PCR if necessary. Lastly, in the event bleeding is caused by biopsy sampling, with our instrumentation we can apply pressure, gel foam or even cautery to the area in attempts to avoid severe bleeding.

With the addition of diagnostic laparoscopy, Angell internists now have the ability to assess patients when ultrasound is less than sufficient and surgery is too invasive.

One example of a case where laparoscopy benefited an Angell patient was that of a 10 year-old black Labrador who presented with a history of an ultrasound-guided liver biopsy diagnosis of liver necrosis most likely secondary to toxin exposure. As the dog did not respond to therapy as expected, we offered to perform a laparoscopic exploratory. Upon doing so we discovered a lobe of liver that was invaded with abnormal tissue which histologically proved to be a poorly differentiated carcinoma.

Other examples where laparoscopy would prove most beneficial include dogs with microhepatica, making ultrasound-guided liver biopsy impossible and patients with poor healing potential where laparotomy would pose high risk (i.e. cushingoid, diabetic or hypoalbuminemic patients). Animals with ascites of unknown origin are also great cases for laparoscopy as we can explore the abdomen and take peritoneal biopsies.
Patient: 6-year-old female chinchilla

Presenting complaint: The chinchilla presented to Angell Animal Medical Center for drooling, matted fur around the mouth, and difficulty eating.

Physical examination: On examination, the chinchilla was dehydrated, had mild ocular discharge and was underweight. Oral examination revealed significant overgrowth of cheek teeth with dental points and lateral deviation of at least one left rostral cheek tooth. No significant abnormalities were seen in the thoracic cavity or abdomen. While the chinchilla was anesthetized, a complete oral examination was performed using endoscopy and speculums designed to facilitate visualization of the oral cavity in rabbits/rodents. Significant dental points were seen on the left side of the oral cavity, which were protruding into the upper left cheek and creating an ulcer. Additionally, all premolars and molars had points and the incisors were slightly overgrown. A dental drill with a straight handpiece, which facilitates maneuverability inside a chinchilla’s mouth, was used to remove points from the abnormal teeth and reduce the height of the incisors and trimming on the chinchilla.

Recovery: On recovery, the chinchilla was drooling less and able to eat normally. She was treated by the owner with an antibiotic, an anti-inflammatory and supportive care including fluids, antibiotics and syringe feeding. Once the animal was stable, a CBC and chemistry, whole body radiographs (including skull) and a dental trim were recommended. Radiographs revealed mild ocular discharge and was underweight. Oral examination revealed significant overgrowth of cheek teeth with dental points and lateral deviation of at least one left rostral cheek tooth. No significant abnormalities were seen in the thoracic cavity or abdomen. While the chinchilla was anesthetized, a complete oral examination was performed using endoscopy and speculums designed to facilitate visualization of the oral cavity in rabbits/rodents. Significant dental points were seen on the left side of the oral cavity, which were protruding into the upper left cheek and creating an ulcer. Additionally, all premolars and molars had points and the incisors were slightly overgrown. A dental drill with a straight handpiece, which facilitates maneuverability inside a chinchilla’s mouth, was used to remove points from the abnormal teeth and reduce the height of the incisors.

Key factors: Dental disease should be on the rule-out list for the following common signs in rabbits, guinea pigs, and chinchillas:

- weight loss
- drooling
- difficulty eating
- masses/wellings around the facial region
- ocular or nasal discharge
- diarrhea
- hiccoughs
- nonspecific signs of illness

We recommend a thorough oral examination, including examination of the premolar and molar teeth, for every rabbit, guinea pig and chinchilla patient. Advanced imaging, including radiography, endoscopy and/or computed tomography, may be helpful to demonstrate the extent of dental disease and determine the best treatment option. Awareness of the unique dietary requirements of rabbit and rodent patients is essential. This includes the importance of constant access to grass hay, because inadequate levels of dietary fiber can be related to dental disease.

About the Angell

Animal Medical Center's Avian and Exotics Department

Case treated: 1,542 cases in 2006

Client species breakdown:

- small mammals: 45%
- birds: 45%
- reptiles and amphibians: 10%

For more information: Contact Jennifer Graham, DVM, Dipl. ABVP-Avon at AvianAvon@angell.org for an informational handout covering the diagnosis and treatment of dental disease in small mammals. Drs. Graham, Orcutt and Mickey are available seven days a week on a referral basis.

In addition, avian and exotic patients are seen by the emergency service at Angell Animal Medical Center after regular clinic hours. Please contact us at 617 522-5011 if you have questions.

Pain

Under her direction, the Pain Medicine Service provides advanced assessment of pain and treatments. This includes multiple types of drug therapy, nerve blocks and other forms of local anesthesia for surgical and cancer pain, acupuncture and trigger point therapy and recommendations for physical therapy and lifestyle changes.

The Pain Medicine Service consists of both inpatient and outpatient services. Clients with hospitalized pets at Angell can receive consultations to help manage current, acute or expected pain. Chronic pain is very different from surgical or other types of acute pain and requires a different kind of assessment and treatment. Chronic pain management can be performed at the Pain Medicine Service's Outpatient Clinic. To refer clients to the Pain Medicine Service at Angell-Boston call Eleanor Cousins at 617 522-5011.

Laparoscopy

Finally, the time it takes to perform a laparoscopy which includes exploration of the abdomen and sample collection is relatively short in some cases taking as little as 25 minutes. Many of these patients can go home the same day which is not the case with most ultrasound-guided biopsies and exploratory surgeries.

In short, laparoscopy is an efficient, safe, diagnostic modality to assess patients when ultrasonography is less than satisfactory and exploratory surgery is too invasive. Our diagnostic capabilities continue to expand and we look forward to helping you with your patients.

Submit your skin biopsy to a dermatopathologist.

Dermatopathologists are pathologists or dermatologists with specialized training within the field of dermatopathology. We are veterinarians who love skin and love examining the things that go wrong with skin. Across the country, there are several veterinary institutions where cases submitted for skin biopsy are reviewed jointly by dermatologists and pathologists. By thoroughly evaluating the clinical and histopathologic details of a case, these dermatopathology services offer a comprehensive approach to the evaluation of skin biopsies.

In 2006, the Angell Pathology and Dermatology Services were pleased to welcome Melanie Buote, DVM, DACVP, as the Anatomic Pathologist at Angell-Boston. Dr. Buote has specialized training in the field of dermatopathology. With the addition of Dr. Buote to our staff, all skin biopsies obtained at Angell are now processed and read in-house. Many specialized stains for the evaluation of dermatologic conditions can also be performed on-site.

The Angell Dermatology Service now offers a dermatologist’s review of the dermatologic and histopathologic findings for Angell cases with skin biopsies. This enables a skin biopsy to be reviewed by two board-certified specialists trained in both dermatology and dermatopathology. Stay tuned for more information on when this service will be offered nationally.

About the Angell

Animal Medical Center

Avian and Exotics Medicine

Sarah Kashdan (left) and Dr. Kimberly Mickey (right) performing the oral examination on the chinchilla.

Avian and Exotics Medicine

Kathy Tater, DVM, DACVD (Dermatology)

The histopathologic examination of the skin can be extremely useful in the diagnostic work-up of certain dermatologic cases. The following are some key tips on getting the most information out of this important diagnostic test.

Select the appropriate cases for skin biopsy. Prior to the skin biopsy, the clinician will have a list of differential diagnoses to rule in or rule out. Skin biopsies are in general the most helpful in diagnosing neoplastic, autoimmune, endocrine and infectious diseases of the skin. Skin biopsies typically yield only limited information in cases of allergic skin disease.

Prepare your patient and its skin for biopsy. Any treatment that impacts inflammation and hair growth, such as glucocorticoids, should be discontinued prior to biopsy. It is best to biopsy prior to the administration of medications such as glucocorticoids. If the patient has already been treated with such therapy, it should be stopped for at least two to three weeks before biopsy for optimal results. Any pyoderma should be treated with antibiotics prior to biopsy if an underlying skin disorder is suspected. This prevents the inflammatory infiltrate associated with the bacterial skin infection from altering the cellular pattern of the skin biopsy.

Biopsy the primary skin lesions. Primary lesions result from the underlying fundamental pathologic process of skin diseases and are therefore most diagnostic. Examples of primary lesions include papules, nodules, tumors, plaques, macules, patches, pustules, vesicles, bulla or ulcer. The biopsy of ulcerated lesions is generally unwarranted.

Give the pathologist lots of information. A thorough description of the history and clinical lesions will go a long way in helping your dermatopathologist give you and your patient an accurate diagnosis. The distribution of the skin lesions can be very important in making a diagnosis. Any treatments that were administered prior to the biopsy should be listed. Because a picture truly can be worth a thousand words, images of your patient’s skin lesions are always greatly appreciated.

Getting the Most Out of Your Skin Biopsies

Kathy Tater, DVM, DACVD

Save Sunday, November 4, 2007 for Nutrition Seminar

Sunday, November 4, 2007, 8am to 4pm

Angell Animal Medical Center

350 S. Huntington Ave., Boston, MA 02130

This educational seminar on Nutrition is open to veterinarians, veterinary technician and veterinary students. Speakers include Rebecca Ramford, PhD, DVM, DACVN and Erika dePapp, DVM, DACVIM. Additional speakers to be scheduled.

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To learn more about Angell Animal Medical Center, visit www.angell.org or call 617 541-5192 for more information or to register.
Angell Animal Medical Center Referral Guide

Angell-Boston has implemented three specialty-specific liaisons dedicated to fulfilling referring veterinarians’ inquiries and referrals. These specialty-specific liaisons are in the following areas:

**Dermatology Service**
Referral Liaison: Rebecca Stlaske
Referral Line: 617 524-5733  Referral Fax: 617 989-1613
Email: dermatology@mspca.org  Website: www.mspca.org/dermatology

**Neurology Service**
Referral Liaison: Natasha Bureau
Referral Line: 617 541-5140  Referral Fax: 617 989-1666
Email: neurology@mspca.org  Website: www.mspca.org/neurology

**Oncology Service**
Referral Liaison: Gary Vanasse
Referral Line: 617 541-5136  Referral Fax: 617 541-5130
Email: oncology@mspca.org  Website: www.mspca.org/oncology

When you would like to refer a client to Dermatology, Oncology or Neurology at Angell-Boston, please call the specialty-specific liaison that will be able to better serve you.

**For all other referrals, please continue to call Eleanor Cousino, Angell-Boston referral coordinator at 617 522-5011.**