Partners In Care

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Pre-Hospital Sedation Options for Aggressive and Anxious Dogs

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Aggressive and/or fearful dogs present several challenges for the small animal practitioner. These patients are difficult to fully evaluate and present a safety hazard to the clinic staff, veterinarian, and sometimes even the owner. In addition, a nervous dog contributes to heightened stress within the work area affecting not only people, but other pets alike. In dogs known to be aggressive within the hospital setting or those with tremendous fear/anxiety, making physical exams and basic assessment impossible, pre-hospital sedation can dramatically improve the experience for all involved in that patient’s care.

Before considering pre-hospital sedatives, it is imperative that the veterinarian as the prescriber has adequate knowledge of the dog’s health status and understanding of when a medication is contraindicated. A full physical exam should be completed before prescribing any of the recommended medications. Additionally, each go-home medication should be discussed with the owner in terms of patient risk(s) and what to expect at home. The therapies introduced in this brief article, acepromazine, gabapentin, trazodone, and melatonin, are meant to supplement low-stress handling (e.g., bringing overly aggressive dogs directly into an exam room.

(continued on next page)
The drug perianesthetic period. Acepromazine elicits veterinary world primarily during the use of sedatives and has widespread use within the basal ganglia and limbic system. The effect of this drug exists for veterinary use in two forms—oral and injectable—and while the oral formulation has historic use in managing at-home anxieties (e.g., thunderstorms, fireworks, etc.), it can be unreliable in terms of desired sedative effect, and onset/duration can be large for this medication (Table 1). In the acute setting (first one to two days of administration), sedation following gabapentin administration is often profound. This makes gabapentin an ideal agent alone, or often in combination with acepromazine, as part of a pre-hospital sedation protocol in the challenging dog patient. Dosing recommendations and timelines are presented below (Table 3). Owners need to be made aware that their pet will often appear considerably more sedated at home. Supervision on stairs and getting into and out of the car should be recommended to clients with gabapentin alone or in combination with other sedatives.

### Trazodone

Trazodone is classified as a serotonin receptor antagonist and reuptake inhibitor (SAR) and is used primarily in the acute hospital setting to manage anxious patients as well as long-term as a single or adjunctive agent in dogs with anxiety disorders. While trazodone has a large safety profile, it should be used with caution in patients with known arrhythmias as serotoninergic medications may increase the heart’s arrhythmogenic potential. Onset of action is approximately one hour, and the dose range can be larger for this medication (Table 3), but for the purpose of pre-hospital sedation, it is recommended to start at 5 mg/kg.

Melatonin, the naturally occurring hormone produced by the pineal gland, is available as a neurotonic in dogs (provided by melatonin, etc.). While melatonin has proven beneficial in the management of certain endocrine disorders, it is a helpful adjunct in canine stress disorders. Therefore, melatonin is offered as an over-the-counter recommendation for the dog having these dogs sit in a waiting room with other stressed/vocal animals) within the clinic or at home with the injectable without needle, two doses in case one is lost during administration attempt and instruct that effects are most profound following absorption from the oral mucosa. Contraindications are listed, but primarily include diseases that would deter one from using acepromazine in an anesthetic protocol (Table 3).

Gabapentin is an antiepileptic, anxiolytic, and pain management agent widely used in humans and more recently used in veterinary medicine for chronic pain therapy. Exact mechanism of action of anagrelide is unknown, but postulated due to interaction with voltage-gated calcium channels. In the acute setting (first one to two days of administration), sedation following gabapentin administration is often profound. This makes gabapentin an ideal agent alone, or often in combination with acepromazine, as part of a pre-hospital sedation protocol in the challenging dog patient. Dosing recommendations and timelines are presented below (Table 3). Owners need to be made aware that their pet will often appear considerably more sedated at home. Supervision on stairs and getting into and out of the car should be recommended to clients with gabapentin alone or in combination with other sedatives.

**References:**


### DRUG DOSE WHEN TO ADMINISTER CONTRAINdications

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<tr>
<th>DRUG</th>
<th>DOSE</th>
<th>WHEN TO ADMINISTER</th>
<th>CONTRAINdications</th>
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<tbody>
<tr>
<td>Acepromazine</td>
<td>Tablets: 0.2 mg/kg</td>
<td>Recommended: injectable (OTM) 0.005-0.05 mg/kg</td>
<td>Significant cardiovascular disease</td>
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<td></td>
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<td>Small volumes can be diluted with 0.05% saline for easier administration</td>
<td>Kidney disease</td>
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<td></td>
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<td>Time of onset—10-30 minutes, so best given 30-60 minutes before hospital visit</td>
<td>Lower failure</td>
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<td>Trauma patients</td>
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<td>Critically ill</td>
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<td>Pediatrics and geriatrics</td>
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<td>Gabapentin</td>
<td>10-25 mg/kg (aper dose in very hard-to-handle dogs, lower end of dose in geriatric patients)</td>
<td>Give PO the right night prior to hospital visit, then repeat same dose the morning of hospital visit (at least 4 hours prior)</td>
<td>Liver failure</td>
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<td>Trauma patients</td>
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<td>Critically ill</td>
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<tr>
<td>Melatonin</td>
<td>By weight: 25 kg: 1 mg</td>
<td>Morning of hospital visit, same time frame as morning gabapentin (4 hours prior to visit)</td>
<td>None</td>
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<tr>
<td></td>
<td>5 kg: 1.5 mg</td>
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<td>Eye precautions</td>
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<td></td>
<td>10 kg: 2 mg</td>
<td></td>
<td>Sedation following gabapentin (4 hours prior to visit)</td>
</tr>
<tr>
<td></td>
<td>15 kg: 2.5 mg</td>
<td></td>
<td>Patients on monoamine oxidase inhibitors (MOAs)</td>
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<td></td>
<td>20 kg: 3 mg</td>
<td></td>
<td>Patients with seizure history/epilepsy</td>
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</table>

*Timing recommendations based on morning appointments. If appointment falls in afternoon or evening, morning administered medications are likely to have little effect. Timing regimen should be adjusted based on dog’s appointment time.

**Have you tried Angel’s Referring Veterinarian Portal?**

Angel’s Referring Veterinarian Portal is a mobile-friendly online portal for referring veterinarians to gain 24/7 access to their patients’ lab results, imaging studies, SOAPs, referral reports, check-in/discharge status, discharge instructions, and more. To receive a login and password for your clinic, please contact us at 617-522-7282.
Evaluating a limping dog or cat can be a frustrating and unfruitful exercise, especially for the veterinarian and client alike. Radiographs of the affected limb will almost certainly be part of the diagnostic workup at some point, and interpreting the radiographs may be similarly frustrating for the primary care veterinarian, radiologist, or surgeon. As with most medical problems, starting with a good history and thorough physical exam (in this case, an orthopedic exam) is an essential baseline. Determining whether the lameness is acute or chronic, intermittent or constant, shifting or not, progressive or static will help narrow the list of differentials.

The most important part of the orthopedic exam (and probably the most important part of the workup) is attempting to localize the cause of lameness to a single joint or single bone. From a radiographic perspective, the reason for this is that the diagnostic quality/yield of your images will be much greater if you are tightly collimated to the area of interest (Figure 1).

Reducing field of view will reduce x-ray scatter, thereby reducing noise and blurriness. Additionally, focusing on one joint will make it easier to position the patient for a straight caudodorsal and lateral view. Significant lesions are frequently missed due to slight oblique positioning (Figure 2).

Collimating your x-ray exposure tightly to the area of interest will greatly improve the quality of your radiograph. On the right, attempting to capture both limbs and using very wide collimation results in a poor-quality radiograph. On the left, same cat in same position, but with collimation tight over the right carpus.

As with most radiographic interpretation exercises, recognizing what is normal bone/joint anatomy is prerequisite for determining what is abnormal. A good radiographic atlas is essential for helping to determine whether a bone or joint is normal. The atlas I use most, and the textbook I most commonly consult on a regular basis, is An Atlas of Interpretative Radiographic Anatomy of the Dog and Cat by Arlene Coulson and Kenneth Lewis (Willey-Blackwell). This atlas includes normal radiographic dog and cat anatomy for adult animals and juveniles at various stages of development, as well as some conformational variants such as chondrodystrophics and brachycephalics. Sometimes it is unclear whether a particular joint/structure is normal for an individual patient, it can be very useful to obtain a comparison radiograph of the contralateral limb (Figure 3).

Once you have your well-positioned, well-collimated radiograph centered on the painful joint or bone, the most important question (besides whether an abnormality is present or not), is whether you have an aggressive or nonaggressive lesion. Although many tend to equate an aggressive bone lesion with cancer, technically an aggressive lesion is defined as any process that, if left unchecked, would progress to complete destruction of bone. In addition to cancer, infection (bacterial or fungal osteomyelitis) and autoimmune disorders (rheumatoid arthritis) can lead to aggressive bone lesions. There are many classic radiographic criteria used to determine presence and severity of an aggressive bone lesion, but typically the two we focus on are presence/extent of osteolysis and the presence of an ill-defined periosteal reaction.

There are three classic patterns of osteolysis: geographic, moth-eaten, and permeative. Generally speaking, the presence of lytic lesions is almost always associated with an aggressive lesion, and the differentiation between the patterns is somewhat academic. This observation is that some benign lesions such as bone cysts may cause geographic lytic lesions, which is defined as an area of very well-delineated bone loss, frequently circular or oval-in-contour. Other than these rare exceptions, it is mostly just critical to identify the presence of bone loss, regardless of pattern.

Periosteal reactions are a bit trickier. Generally speaking, a periosteal reaction is defined as an area of new bone formation occurring along the surface of the bone. This is a response of the periosteum surrounding the bone, which is defined as an area where the periosteum is able to lay down new bone in response to any form of stimulus or injury. With nonaggressive lesions, the periosteal reaction is interrupted or uninterrupted is to imagine using a pencil to trace the contour of the periosteum. It is possible to trace the entire border of the periosteal reaction without lifting the pencil tip off the radiograph, that is an uninterrupted periosteal reaction.

Once you have determined whether an aggressive or nonaggressive bone lesion is present, the differential diagnoses and subsequent case workup should become fairly clear. With an aggressive bone lesion, bone biopsy is typically the next step to assess for malignancy. If there is potential exposure to fungal disease, or if there is the potential for bacterial infection (trauma, previous surgery in the affected area, obtaining bacterial cultures and fungal titers would also be prudent. Without aggressive lesions, the differentials are less likely giving to be related to developmental diseases in young animals and degenerative joint disease in older animals. A thorough discussion of these various orthopedic issues is beyond the scope of this article.
I n New England, where systemic fungal diseases and other infectious lesions do not frequently cross the microscope stage, neoplastic conditions account for the majority of submissions. To improve the diagnostic process, the pathologist’s primary goal is to achieve a definitive diagnosis. In addition—particularly in the case of malignant neoplasia—the pathologist seeks to assess the extent of disease and to provide a tumor grade in order to guide future treatment and offer prognostic information. Evaluation of neoplastic malignancy is a sometimes frustrating task fraught with various challenges, including tissue sampling, histologic grading during processing, blurring or distortion of inked margins, and slicing of facial plates, to name a few. Tumor grading can be more objective, but depends on having established criteria for specific types of cancer. This article highlights several under appropriate application of grading schemes, including examples of grading systems currently used for biopsy case studies at Angell.

The purpose of a histologic tumor grade is to predict biological behavior. In general, the higher the grade, the greater the risk of progression and/or death. A grade 1 tumor presents a low risk of recurrence and a good overall prognosis; a grade 2 tumor presents a moderate risk of recurrence and a moderate overall prognosis; a grade 3 tumor presents a high risk of recurrence and a poor overall prognosis. The purpose of histologic grading is to help the pathologist make an accurate diagnosis and provide a tumor grade that will help the clinician determine the best course of treatment.

In 2015, a novel grading scheme was proposed for cats that included lymphatic invasion, perineural invasion, and extracapsular extension. In a veterinary pathology textbook detailing neoplastic diseases of domestic animals, Rispens outlines a three-tier grading scheme for feline mammary carcinoma in both species, which basically consists of multiple published findings. Each of three variables—tumor invasion, mitotic index, and tumor necrosis—is scored from 1 to 3, and the sum of the scores determines histologic grade. In 2018, a novel grading scheme was proposed for cats that included lymphatic invasion, perineural invasion, and extracapsular extension. In a veterinary pathology textbook detailing neoplastic diseases of domestic animals, Rispens outlines a three-tier grading scheme for feline mammary carcinoma in both species, which basically consists of multiple published findings. Each of three variables—tumor invasion, mitotic index, and tumor necrosis—is scored from 1 to 3, and the sum of the scores determines histologic grade.

CANCER TISSUE SARCOMA

To examine the tissue sarcoma grading scheme published in the 1997 veterinary system but would be a grade II based on the biopsy publication for human tumors.14 Soft tissue sarcoma grading based on these published criteria is limited to dogs with cutaneous or subcutaneous masses and does not include the histologic features of the pleomorphic fibrous or epithelial fibrosarcomas. Some potential weaknesses of the STS grading systems above include “truncating” multiple histologic tumor features (e.g., grading) using a subjective variable (degree of differentiation) as a scoring component, and applying a score to necrosis. Tumor types included in the soft tissue sarcoma category include fibrosarcoma, peripheral nerve sheath tumor, myxosarcoma, liposarcoma, peripheral wall tumor (including hemangiosarcoma), pleomorphic sarcoma, malignant neoplasms, and undifferentiated sarcoma. Excluded from the STS group are histiocytic sarcoma, hemangiosarcoma, synovial cell sarcoma, leiomyosarcoma, and rhabdomyosarcoma. Some of these entities, such as peripheral wall tumor and non-neoplastic peripheral nerve sheath tumors, may be difficult to distinguish histologically. Immunohistochemistry may assist in further phenotyping sarcomas but is often not routinely to diagnostic cases. Advanced techniques, such as immunohistochemistry, proliferation markers, and prognostication panels, are supplementary tools that may eventually negate some of the older grading schemes that are based solely on histopathology. Currently, ancillary tests are used in a supplementary fashion. For example, immunohistochemistry may be employed to further classify soft tissue sarcomas while the mast cell tumor gradation panel provides additional prognostic data for canine cutaneous mast cell tumors.

SUMMARY

It is important to reiterate that histologic grades are employed to PREDICT biological behavior; not to definitively proclaim the future. This has likely been experienced firsthand by those veterinarians reading this article who have treated dogs with “alleged” low-grade cutaneous mast cell tumors that have widely disseminated, or dogs with incompletely excised high-grade soft tissue sarcomas that persist for many years without tumor recurrence. Tumor grading is certainly not a perfect science, which makes it...
The most common type of elective surgery we perform at Angell Ophthalmology is removal of small eyelid tumors via V-plasty. Eyelid tumors can occur in any breed at any age, but older dogs tend to present to our service for evaluation. The most common types of tumors appear as neoplasia of the melanoblast glands, the primary outlet for producing glands located in the eyelid margin. There are dozens of these glands in each eyelid, and the origin of these tumors is usually either the duct lining (epithelioma) or the ascini (adenoma) that grow as multiple small pink to grey wavelike structures (Figure 1). Less common benign tumors that have been reported with any significant frequency include papillomas and melanoblastomas. Fortunately, for most dogs, the vast majority of eyelid margin tumors are benign, in this instance, the risk for metastases, and surgery is usually curative. If left alone, however, the lesions have the potential to be locally aggressive and disfiguring, leading to early tumor removal if possible to reduce morbidity and preserve as much of the normal eyelid margin as possible. For small tumors, cryosurgery can be very effective. It is a sutureless procedure that requires a brief general anesthesia. Typically the tumor is trimmed to the eyelid margin surface (submitted to pathology in most cases), and the affected eyelid is treated with two rounds of freezing with a cryoprobe, about 20 seconds each treatment. Protecting the skin and globe is essential any time there is eyelid cryosurgery. Tissues and a corneal shield are used for this purpose. A chalazion clamp is very helpful to immobilize the eyelid during cryosurgery and will help expose the conjunctival surface of the eyelid margin where the cryoprobe is applied just below the eyelid margin for 40 seconds from visible (as in the eyelid) (Figure 2). Depigmentation (tanned, melanosomes permanent), transient blepharitis, blepharospasm, and skin ulceration is expected with cryosurgery and can last up to seven to ten days peaking about three to five days post-surgery on average. Some local skin ulceration may also occur, and resolves in the first one to two weeks. The goal of care is to destroy any residual tumor cells and allow the eyelid to heal without any incisions or suture placement. Infection is rare, but topical antibiotics and systemic anti-inflammatory and pain medications are typically used postoperatively. CO2 laser has also been used for small eyelid tumors. While cryosurgery is generally done by a veterinary ophthalmologist, surgical resection for margin tumors is not uncommonly done by ophthalmologists and general practitioners alike. For tumors up to 8-9 mm in diameter, eyelid V-plasty under brief general anesthesia can be a successful way to resolve larger eyelid tumors with or without chalazion formation. Chalazion are ruptured melolin gland that cause local inflammation in the region of the primary tumor (Figure 3).

Lipogranulomatous blepharitis (a.k.a. chalazion) is frequently an accompanying diagnosis for many of our eyelid margin tumor biopsies. Simple V-plasty requires sharp resection of the mass with a size 15 surgical blade while the eyelid is immobilized with a chalazion clamp (usually the tissue over the conjunctival surface, but this can vary depending on the orientation of the tumor). Closure is accomplished with a soft braided suture such as 4-0 silk (nonabsorbable) or 4-0 Vicryl (absorbable) depending on the surgeon’s preferences. To reconstitute a fluid eyelid margin and preserve good eyelid conformation, a Figure eight pattern is recommended followed by simple interrupted or cruciate patterns to close the remaining surgical incision (Figure 4).

For dogs and cats, a single-layer closure is usually sufficient. If more suture support is needed, a deeper layer of 5-0 or 6-0 Vicryl can be placed prior to the skin sutures to bring the surgical incision together and provide added strength. Simple continuous or simple interrupted patterns are commonly used, but care must be taken to avoid suture exposure on the conjunctival surface. Complications from V-plasty can be minor or severe and may include corneal ulceration, infection, suture reaction, eyelid margin misalignment, or eyelid regrowth if tumor cells are left behind.

When an eyelid tumor is suspected to be malignant, Types of more malignant tumors on the eyelid include squamous cell carcinoma, melanoma, sarcoma, and mast cell tumors. The treatment is more careful workup often including a complete ophthalmic and aspirate or definitive resection, since surgical margin size and quality of surgical margins are integral parts of the procedures to preserve vision and comfort. Systemic bloodwork, lymph node examination, and chest x-ray are also important prior to any elective surgery for possible metastatic or malignant cancer. There are surgical options for malignant tumors and benign tumors larger than 10 mm that offer more suitable resection than V-plasty can provide. These options include intraocular grafts, H-plasty, and Z-plasty, most frequently performed by ophthalmic surgeons.

When there is concurrent ocular surface disease or suspected swelling from nonmalignant focal blepharitis: Patients with allergies or concurrent dry eye disease are treated with periodic operative cannal health in eyelid infection can exacerbate a sensitive ocular surface. In these higher risk patients, utmost attention to suture placement and generous use of postoperative medicated lubricants and medication to support tear production should be used with utmost precautions. In general, four to six times daily for topical antiinfective therapy including neopolybal or erythromycin are useful for uncomplicated eyelid tumors where the ocular surface is stable. Pain management with short-acting curare and NSAID is also indicated as is an E-collar for up to two weeks. Some eyelid lesions are also inflammatory and do not need surgery for resolution (Figure 5).

Topical neopolybal is applied directly on the lesion two or three times daily for up to 10-14 days usually provides adequate treatment for these conditions. However, some more persistent lesions require more frequent application of the anti-inflammatory or oral steroids and antibiotics in select cases (e.g., staph blepharitis). PMMA cylinder of the lesions can direct the therapy more stubborn swellings and can also disclose more sinonasal conditions including mast cell tumors. Haemophagocytosis has also been reported near the eyelid margin and often resolve on their own with time and supportive care. Styes are less frequent and are simply a chalazion with a bacterial infection. Treatment can be from lancing and local or systemic antibiotics in addition to local antiinflammatorys (e.g., neopolybal).

In summary, many bona fide eyelid masses can be successfully treated with simple surgery. Their appearance is typically spontaneous and uneventful, but may become more distressing in older patients. Considerable care to preserve the eyelid margin continuity greatly reduces the risk for ocular surface complications in the short and long term, and is essential for eyelid function. Eyelid tumors are always addressed with the help of veterinary ophthalmologists, although some smaller tumors can be handled in the care of a primary care veterinarian or can be a体积 of eyelid margin surgery.
How to best socialize the puppy? Ideally, socialization should not consist of simply exposing the puppy to every person, place, dog, or thing. Instead, puppies should be exposed to novel stimuli at a distance at which the puppy can cope with the newness, and an escape option should be in place should the puppy get frightened. Thus, if a neighbor is a tall and robust dog lover, and this huge person leans right over the puppy, causing it to back up, unindulged, even growl, make sure the puppy can escape, and the owner should say “Give the pup some space, he/she is scared, thanks.” The same is true with dog socialization: the pup should be exposed to puppies of a similar size and/or play style. For example, a 10-week-old Parson Russell terrier could be a good match for an adult border collie, and too much for a 9-week-old golden doodle. If the owner is going to take their puppy to a socialization class, they should make sure that:

1. There is at least one staff person to every three dogs, and rewards-based training only is used.
2. There are adult dogs in the class who can gently teach dog socialization skills to the puppies.
3. The puppies will be matched for the best play outcomes, as per above—size and style of play, rather than breed alone, and reciprocal play is shaped during the class. This means puppies take turns chasing each other and being on top (or bottom) during a weaving match, and no puppies are allowed to bully or push other puppies.
4. Puppies are allowed to escape to a “safe place” during class should they feel the need.

If the puppy owner is going to socialize a puppy at a dog park, the above items 2-4 should be adapted: make sure owners are attending to their dogs; that adult dogs are tolerating the puppy; that turn-taking is evident during play, and that puppies can get away from other dogs easily. For most puppies, a prearranged meet-up with known dogs at a dog park will be much safer and productive than tossing the puppy into a typical dog park free-for-all.

In the home, the puppy should have a variety of toys, and the owner should rotate them so they retain the puppy’s interest. Crate-training is recommended. It can be accomplished by feeding the puppy in its crate, leaving treats and toys in there for the puppy to find, and leaving the puppy in there a few minutes at a time, gradually building it up longer days. The crate will also help to housetrain the puppy, as the owner can take the puppy outside as soon as it comes out of the crate and reward it for going in a designated spot outside. The puppy can be taught to ring a bell that hangs at its nose level on the door it goes out, so it can tell the owner when it needs to go out. Until the puppy can recognize it’s better to eliminate outdoors (1) and (2) let the owner know they need to go out, it should be crated or under the owner’s direct supervision at all times. When the puppy goes from playing or being calm to putting its nose on the floor, it should be hustled outdoors to go to the bathroom. If the puppy has an accident, the puppy should not be punished or scolded or it could start to hide where it goes indoors.

Lastly, the puppy’s first veterinary visit will leave a lasting impression, so go slowly with the puppy, pairing fear-provoking stimuli such as stethoscopes and syringes with tasty treats. Sit on the floor with the puppy, rather than leaning over him. Have a few squeaky toys on hand to interest the puppy. If the pup moves away or grins, give him or her a break. Do not scold or punish them as, just as telling you they are frightened. Sophia’s Fido’s books and videos give lots of helpful how-to’s in this regard. By following these guidelines, a puppy’s community can help grow into a well-adjusted, behaviorally healthy family member.

For more information, please contact: Partners in Care Service at 877-315-1539 or behavior@angell.org.

BEHAVIOR

SPOTLIGHT: ELLEN M. LINDELL, VMD, DACVB

Dr. Lindell is a diplomate of the American College of Veterinary Behaviorists (ACVB) and is currently president-elect of the ACVB. She founded a private behavior specialty practice, Veterinary Behavior Consultations, PC, and has treated behavior patients in New York and Connecticut for over 20 years. She also serves as a behavior consultant to other veterinarians on VIN (Veterinary Information Network).

One of Dr. Lindell’s passions is to facilitate good veterinary care for all patients by reducing the stress that can be associated with veterinary visits. Pets and their families often experience anxiety when they arrive at the veterinary hospital. Dr. Lindell is an active member of the Fear Free™ Advisory Panel, a team of animal-care experts working together to understand and prevent fear related to veterinary care. Dr. Lindell is also proud to be a Certified Fear Free™ Professional and a Fully Approved Fear Free™ Speaker. She continues to support and guide veterinary teams as they create a Fear Free culture in their practices.

Dr. Lindell enjoys teaching and has lectured extensively to veterinarians and veterinary technicians as well as to members of clubs and organizations with an interest in animal behavior. She has contributed to several textbooks including the 5-Minute Veterinary Consult, and the BSAVA Manual of Canine and Feline Behavior. Dr. Lindell also contributed to a chapter in the popular publication Decoding Your Dog.

In her spare time, Dr. Lindell treats her own dogs to some fun training. Several of her dogs have earned confirmation, obedience, and agility titles. When the pets have turned in for the evening, Dr. Lindell ends her day by playing classical piano.

BEHAVIOR APPOINTMENTS

- Monday appointments (1 hour): 12pm, 2pm, 5pm, 7pm
- Tuesday appointments (1 hour): 7:30am, 9:30am
- Wednesday appointments (1 hour): 1pm, 2:30pm, 4pm, 5:30pm
- Thursday appointments (1 hour): 2:30pm, 4pm, 5:30pm
- Friday appointment (1 hour): 8am
- Waltham by appointment
- MSPCA-Angell at Nevin’s Farm (in Methuen) by appointment
ANGELL AT NASHOBA: LOW COST CARE FOR FINANCIALLY QUALIFIED CLIENTS

Angell Animal Medical Center and Nashoba Valley Technical High School have partnered to create Angell at Nashoba, a veterinary clinic for low income pet owners that also serves as a rigorous academic and experiential training program for students enrolled at Nashoba Valley Technical High School. Opened on February 3, 2016, the clinic provides discounted:

- SPAY/NEUTER SERVICES
- VACCINATIONS
- BASIC VETERINARY CARE

Open weekdays from 7:45am-4:00pm throughout the year, the clinic does not provide overnight care, specialty service care, nor 24/7 emergency services as Angell's Boston and Waltham facilities do, but will refer cases as appropriate to surrounding specialty veterinary referral hospitals.

To reach the clinic, please call 978-577-5992. The clinic is located at:

100 Littleton Road, Westford, Massachusetts. For more information, visit www.angell.org/nashoba.

Q&A WITH LISA MOSES, VMD, DACVIM, CVMA

Angell’s Pain Medicine Service

DO YOU OFFER HOSPICE CARE FOR PATIENTS?

That mostly depends on how you are defining veterinary hospice care. My training in palliative medicine for people has shaped my definitions of hospice and palliative care. Most of my patients are receiving some form of pain treatment for their primary disease(s), so they are not technically hospice patients who are considered to be ‘actively dying’ and are no longer being treated for their illnesses. And, my patients are not actively dying even though they may be close to the end of their lives. I rarely have owners who ask that treatment be stopped and that their pets be allowed to die. Since my focus is on reducing pain and suffering, my goals of care are closer to that of palliative care medicine and that is how I label my work.

HOW DID YOU BECOME INTERESTED IN BIOETHICS AND MEDICAL ETHICS IN PARTICULAR?

I can’t remember a time when I didn’t ask questions about the role of animals in human society and the moral status of animals. Before becoming a veterinarian I was an animal welfare officer at a place and time when pet overpopulation was overwhelming. That experience really colored my attitude when I began veterinary school. I’ve been fortunate to work with the MSPCA Angell where considering the ethical dimensions of our veterinary practices has always been part of our values. My work on the Emergency and Critical Care service exposed me years of clinical situations where big ethical dilemmas (financial constraints, requests for non-beneficial care, etc.) were part of everyday practice. Of course, since noting pain and suffering is my daily battle, the ethics of treating these patients is an obvious place to start.

But, it’s clear that ethical dilemmas are part of all daily veterinary practice, because we have to balance the needs of our clients with our role as advocates for our patients. I’ve finished a postgraduate fellowship in bioethics and am now continuing my work as a research fellow in biobehavioral science at Harvard’s Center for Bioethics and Yale’s Interdisciplinary Center for Bioethics. I’ve been immersed and gratified at how interested the world of bioethics is in veterinary medicine. I am currently working on bringing some of the tools developed to relieve ethical dilemmas in human health care to veterinary medicine. Moral distress is a big part of work stress for lots of us in veterinary medicine, so I hope that this work will benefit my peers and our patients, too.

YOUR PRACTICE IS CALLED THE “PAIN MEDICINE SERVICE”? WHAT DOES THAT EXACTLY MEAN AND WHAT SERVICES ARE OFFERED?

Angell’s Pain Medicine service consists of an outpatient chronic pain and palliative medicine clinic and a consultation service for hospitalized patients. The overall goal of the practice is to reduce pain and suffering in my patients. More than half of the patients are referred by other veterinary hospitals. We see all species of companion animals and I am happy to consult on large animal cases and horses. There are several reasons why it’s called “pain medicine” and not “pain management.” First off, I’m an internist who has spent over a dozen years as part of Angell’s Emergency/Critical Care service, so my orientation is toward diagnosis and management of animals with complex medical conditions. Most of my patients have significant co-morbid disease and see multiple specialists. Many are close to the end of their lives and they—and their owners—need help managing all of that care. This often includes side effects from the treatments they are receiving, in addition to more on-the-treatment for mucositis, skeletal pain and mobility impairment. I realize as soon as the service was opened that my experience with diagnoses and treatment of all kinds of chronic illnesses was vital to the care of my patients. In order to fully assess my “whole” patient I need to understand the pathophysiology of those illnesses and how medications interact. In addition to diagnosis and assessment of painful medical problems, I work closely with pet owners who need help making decisions about medical care near the end of life. Assessing pain and quality of life in my patients is an ongoing process. I received training in palliative care medicine and pain medicine at various Boston area hospitals for service, so my practice is based upon pain and palliative care services at those institutions.

WHAT KIND OF CASES AND PATIENTS DO YOU SEE IN ANGELL’S PAIN MEDICINE SERVICE?

Lots of our patients are referred from other specialty services. For example, our neurologists might send me a patient who has been diagnosed with a degenerative neurological disease and needs pain management, but the patient also has heart disease that makes treatment tricky. Many clients seek out the service because they cannot assess pain in their pets and are concerned about their quality of life. Extended appointment hours allow me to take an in-depth history and observe a patient exploring my exam room. That’s the key to diagnosing chronic pain.

Because I see so many patients of advanced age, I diagnose a lot of dementia, peripheral neuropathy, and spend a lot of time sorting out whether behavior changes in elderly animals are pain related or not. I am particularly interested in patients with suspected neuropathic pain and those with cancer pain. And, although most of my patients are dogs, I love to see cats and small mammals!

YOUR MEDICINE SERVICE IS BASED UPON PAIN AND PALLIATIVE CARE MEDICINE AT THOSE INSTITUTIONS. HOW DIFFERENT IS YOUR APPROACH TO CARE?

The person whose name is on the card or documents must be present at the mobile clinic. The only exception is a spouse with the same last name and address.

Financial Qualifications for Clients

To qualify for Angell at Nashoba services, clients must present a photo ID and one of the following:

- WOMEN, INFANTS, AND CHILDREN (WIC) PROGRAM CARD
- SPAY AND NEUTER ASSISTANCE PROGRAM CERTIFICATE
- SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP) CARD (FORMERLY KNOWN AS FOOD STAMPS/EBT CARD)
- LETTER/LEASE FROM THE OWNER’S LOCAL HOUSING AUTHORITY SHOWING THAT THE OWNER IS A PARTICIPANT IN PUBLIC HOUSING IN THE FOLLOWING COMMUNITIES: LOWELL, CHELMSFORD, LITTLETON, GROTON, SHIRLEY, AYER, TOWSEND, PEPPERELL, WESTFORD

For more information about Dr. Moses and Angell’s Pain Medicine Service, visit www.angell.org/painmedicine.

Hear Dr. Moses speak at our Angell Sunday CE on April 9, 2017 at the Burlington Marriott. Dr. Moses is joined by Angell’s Anesthesiologist Kate Cummings, DVM, DACVAA and Stephanie Reis, DVM, DACVIM, as well as veterinary technician Liz Maguire, RN, CVT, VTS (Anesthesia/Analgesia) for this 5-credit CE (pending RACE approval). Topics include pain assessment, management of hypothermia during anesthesia, use of and tidal CO2 monitoring, use of Analgesics, and an interactive, case-based panel discussion including veterinary and technician perspectives. Visit www.angell.org/CE to register.
We encourage you to contact Angell’s specialists with questions.

Main Phone: 617-522-7282 (Boston), 781-902-8400 (Waltham) Veterinary Referrals: 617-522-5011

Angell at Nashoba: 978-577-5992

We encourage you to contact Angell’s specialists with questions.

Partners In Care

REFERENCES


INTRODUCING ANGELL’S COMFORT CARE PROGRAM

The Angell Comfort Care Program provides extra comfort and reassurance for hospitalized patients in our Critical Care Unit (CCU).

Trained MSPCA-Angell staff volunteers provide extra cage-side affection to patients identified by veterinarians and technicians as animals that would benefit from additional TLC due to their particular circumstance (prolonged hospital stay, their level of anxiety, etc.).

FOR MORE INFORMATION, PLEASE VISIT: WWW.ANGELL.ORG/COMFORTCARE