While Beverly Sturges explores stem cell research to promote healing of spinal cord injuries and collaborates on a new approach to control epilepsy, she says, “Where I spend most of my time is in the clinic teaching students and caring for animals. We’re busy, and we want to stay that way.”

“We” is the Neurology/Neurosurgery Service, where five veterinary neurologists are treating disorders of the brain, spinal cord, and vertebrae, as well as diseases affecting muscles, nerves and the neuromuscular junction.

Treatments for most tumors of central nervous system

Sturges says, “Even other veterinarians may not realize the extent of neurology treatments available here. We’ve got treatments, conventional and experimental, for many tumors in the brain,” Sturges explains, including meningiomas and gliomas, common tumors in dogs and cats. “We also work with tumors of several kinds that compress the spinal cord.

“With newer technologies such as intra-operative ultrasound, an ultrasonic aspirator and post-operative imaging, our ability to excise brain and spinal cord tumors has increased dramatically, even with tumors previously considered inoperable,” Sturges says. “One of the things we do that isn’t always done elsewhere is to follow up each procedure with an imaging study to assess whether we’ve removed all the cancerous tissue. This gives us a much better baseline for assessing the success of surgical removal alone or in combination with other treatments like chemotherapy and radiation therapy.”

Inflammatory and degenerative diseases

The service handles a wide range of spinal diseases that require laminectomies or spinal stabilization procedures. Pets with chronic inflammatory disease also seek out the service, Sturges says. “We’re using a variety of drugs that mediate the immune response.”

In-house electrodiagnostic and neuromuscular disease laboratories help achieve a precise diagnosis with diseases of muscle, nerve and the neuromuscular junction.

The service provides 24-hour emergency care for animals with immediate neurological and neurosurgical needs.

Teaching

How do complicated cases help faculty teach students who may never specialize? “Most cases referred to our service are pretty complex,” Sturges acknowledges, but there is always something that students can learn. “We canvass all cases so students get a good, broad spectrum of clinical experience with disorders that they are most likely to encounter.” For example, degenerative disc disease in dachshunds can be managed with medical and surgical treatment. “We like to expose students to things they may not necessarily do while in practice, but should know about so that they can educate/refer clients and provide the best care for their patients.

“I realize that my biggest influence is in teaching today’s students, who will become tomorrow’s referring veterinarians,” Sturges says. “Their referrals will keep the hospital a center of excellence. The students need to know how to recognize a patient with neurological disease and identify the right resources to find patients the help they need.”

Neurology/Neurosurgery Specialists

- Peter Dickinson
- Marguerite F. Knipe
- Richard A. LeCouteur
- Beverly K. Sturges
- Karen M. Vernau, Chief of Service