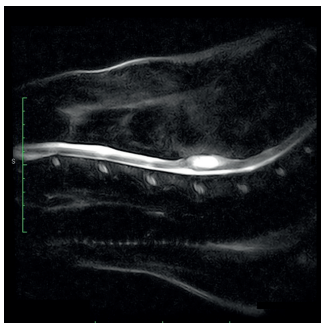
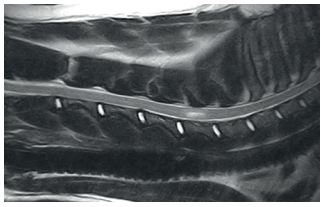
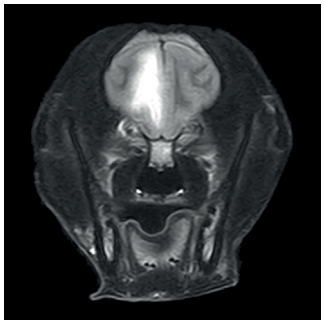
The Impact on Animal Companion Care with **In-House MRI**





VETERINARY EMERGENCY REFERRAL CENTER



Dr. B. Nanai, DVM
DECVN, DACVS
EBVS® European Specialist
in Veterinary Neurology
Member of European College
of Veterinary Neurology

esaote north america

Dr. Beatrix Nanai was born in Budapest, Hungary. She graduated from the University of Veterinary Sciences, Budapest Hungary in 1998 where she completed a surgical internship. In 2001 she relocated to the United States and after receiving Educational Commission for Foreign Veterinary Graduates (ECFVG) certification, she completed a surgical externship at South Carolina Surgical Referral Services. Between 2004-2007, she completed a residency in veterinary neurology and neurosurgery at Animal Emergency and Referral Center in Fort Pierce, Florida. In 2007 she became a Diplomate of the European College of Veterinary Neurology/Neurosurgery. She continued with her second residency training through the American College of Veterinary Surgeons at the Animal Emergency, Critical Care and Diagnostic Center in Melbourne, Florida. In 2014 she obtained her second specialty board certification and became a Diplomate of the American College of Veterinary Surgeons. In 2016, Dr. Nanai moved to Pensacola and she is currently the head of the Surgery/Neurology department at the Veterinary Emergency Referral Center. Dr. Nanai enjoys sharing her knowledge and has given lectures for various veterinary medical associations, has several peer-reviewed publications and written articles for DVM360 Magazine. In her spare time, Dr. Nanai enjoys traveling with her husband, she loves entertaining her sphinx cat Nebka and she practices kung fu martial art.

As a diplomate in the field of Veterinary Neurology, Surgery & Emergency care, your background and experience are very important to many veterinarians that are willing to improve the diagnostic capabilities at their practice and are wondering what is best. In this regard, what are the main reasons you would suggest an MRI is performed?

MRI is recommended for most neurological illnesses in small animals, including brain, spinal disorders, and peripheral neuropathies. The central nervous system (the brain and the spinal cord) is hidden within the bony skull and the spinal canal formed by vertebrae. Xray imaging - the most commonly available diagnostic modality accessible to Vets – is unable to see through these protective boundaries. MRI looks beyond bones, and can reveal the fine nervous tissue, the anatomy, and any pathology. Therefore, MRI is recommended with ataxia, paralysis, seizures, strokes, vestibular disorders, unexplained pain, facial asymmetry, and many other neurological conditions. MRI is also used to diagnose joint and ligament problems such as cruciate ligament disease, meniscal tears, osteochondrosis, but currently the use of MRI in veterinary orthopedics is not as well established as it is in human medicine.

For what pathologies would you suggest MRI gives better visualization than CT?

MRI gives better visualization for all nervous tissues (and all soft tissues elsewhere in the body) compared to CT. However, CT has an important role in certain neurological conditions where bony pathology is also suspected. Such conditions are spinal and skull fractures, spinal luxation's, head trauma cases, and surgical planning for implant placement. CT can also detect bony lesions better than MRI, but it should always be used in conjunction with MRI, to understand all aspects of the given pathology such as spinal contusion within the fractured vertebra, or brain edema and brain herniation in head trauma induced skull fracture.

What has been the impact to your hospital since installing the Vet-MR Grande?

Installation of the Vet-MR Grande allowed me to practice veterinary neurology. An in-house MRI in my facility gives me the tool to provide a state-of-the-art diagnostic modality in a safe, and controlled manner. The diagnosis obtained with the Esaote Vet-MR Grande leads to appropriate treatment plan for my patients, which benefits them, their owners, and benefits the hospital as well.

How was the learning curve for you and your staff of how to operate and use the Vet-MR Grande?

The Esaote Vet-MR Grande is very user friendly. In our hospital several veterinary nurses and Doctors can operate this amazing machine. The approximate time to learn basic operation is within 1 week or 7-10 scans. After installation, the company provided us with hands on training, and they also set costume protocols based on my needs.

The Esaote Vet-MR Grande has small a footprint, but still exhibits high performance in the routine clinical use. In your view, is this a good balance of diagnostic quality and economic sustainability?

The Vet-MR Grande is low field and should not be compared with high field counterparts, as it has its strengths and benefits within my practice. Since my patients are small animals, we can obtain diagnostic quality images with the Vet Grande. There are some exceptions, for example occasionally very small brain lesions such as certain micro bleeds or mini strokes and metabolic or storage diseases. Scan time can be longer if we are to compare to high field MRI. Knowing this, to decrease scan time, we chose wisely the sequences we use for the given case, and a neurologist should be the one who makes such decisions during the scan, in real time. I also enhance my diagnostic ability by sending all images for neuro radiology interpretation, which should be done anyway even with high field images, just like in human medicine. Knowing all this, when look at machine cost, maintenance, and repair, and that we can provide a diagnostic solution simply and cost effectively, the Vet Grande is an asset in neurology practices where high fields are not sustainable due to cost.

The decision journey to buy an MRI system is usually quite long and complicated, which primary factors determined your choice?

We chose the Esaote Vet-MR Grande because I had worked with a previous model, and I knew the reputation of Esaote, the machines reliability. As I had moved to the area and was building my neurological practice as a sole neurologist in the hospital, the investment in this technology was a safer solution for me regarding costs, and still with great diagnostic image capability.

In summary, what would you recommend to your colleagues when considering an MRI, and the reasons why the Vet Grande is a suitable solution for Veterinary practices?

I highly recommend the Esaote Vet-MR Grande to all veterinary neurologists who are not sure about the affordance of a high field magnet in their practice, but still wants to provide high level of medicine to their patients, referring veterinarians, and the community.

160000324MAK Ver. 01

esaote north america

Esaote North America, Inc.
11907 Exit Five Parkway Fishers, IN 46037 - Main Phone: 317.813.6000, Toll Free Ultrasound and MRI: 800-428-4374 - Quick Support Esaote North-America & Canada: 800-428-4374 - info@esaoteusa.com