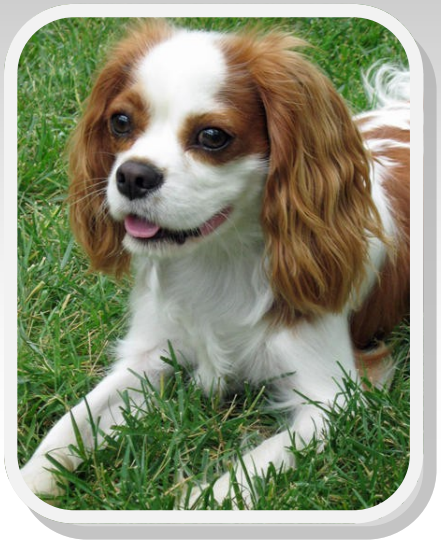
Meet Lily



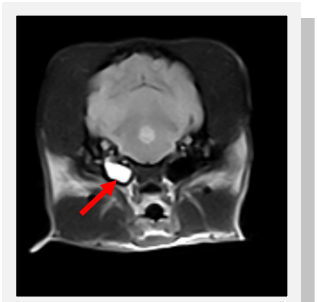
Patient: Lily

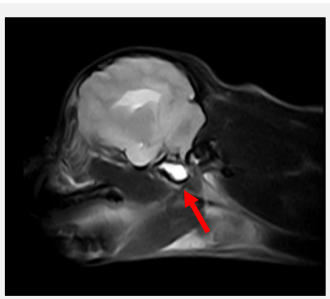
Breed: Cavalier King Charles Spaniel

Age: 3 years 6 months

Gender: Female

Symptoms: History of scratching at left ear.





Lily was brought to her family Veterinarian after her owners noticed that she was persistently scratching at her left ear. The Veterinarian completed a thorough examination and decided that an MRI was the best way to look inside Lily's ear. He cautioned the owners that Lily may be suffering from inner ear disease or possibly, Syringohydromyelia[1]. Syringohydromyelia is a disease of the spinal cord characterized by fluid filled cavities within the spinal cord[2]. It is also know as "neck scratcher's disease", because one of its common signs is scratching in the air near the neck. In short, the back half of the skull is typically too small to accommodate all of the brain's cerebellum so fluid squeezes through the hole at the back of the skull[3]. Unfortunately, due to breeding practices Syringohydromyelia is more widespread in Cavalier King Charles Spaniels than most other breeds. Lily was referred to a specialty hospital in the area for an MRI and the results provided her owners with wonderful news. There was no crowding of the cerebellum or Syringohydromyelia discovered. Lily's symptoms were a result of, primary secretory middle ear disease (PSOM), resulting in excess mucus build up in the inner ear. Lily was sent back to her family Veterinarian where her condition was promptly treated. Her owners are happy to report that the scratching has stopped and Lily is back to her normal, *very active*, self.

[1] *Syringohydromyelia in Cavalier King Charles Spaniels (CKCS)* http://vetspecialists.co.uk/factsheets/Neurology_Facts/Syringohydromyelia.html

[2] *Pet Owner's Guide to Syringomyelia* http://www.caninechiariinstitute.org/patient-center/owner-guide-to-syringomyelia

[3] *Syringomyelia (SM) and the Cavalier King Charles Spaniel* http://www.cavalierhealth.org/syringomyelia.htm

Meet Daphne

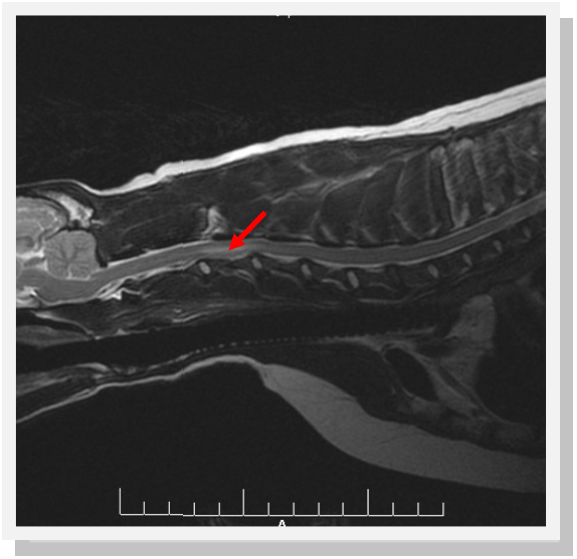
Patient: Daphne

Breed: Miniature Schnauzer

Age: 8 years

Gender: Female

Symptoms: Sudden onset paralysis



Daphne jumped off the couch and was left in an immediate state of paralysis. She was rushed to her family Veterinarian, who offered possible causes for the paralysis and cautioned her owners that the outcome of any of the diagnoses was not good. Daphne's family was told that they needed to be prepared to make the difficult decision to humanely euthanize her. The next morning Daphne, still fully paralyzed, was referred to a specialty hospital. The Veterinary Neurologist performed a thorough examination and offered the owners a little glimmer of hope that Daphne's condition may in fact be treatable. He told her owners that the only way to definitively diagnose her condition was through an MRI. Daphne was scanned and a diagnosis of Fibrocartilaginous Embolism (FCE) was confirmed. FCE is thought to be caused by a small fragment of intervertebral disk material that migrates into the blood vessels of the spinal cord. This material blocks the blood supply to the spinal cord causing a "stroke". Some feel the Miniature Schnauzer is at higher risk for FCE as this breed tends to circulate excess blood fats and cholesterol that may predispose them to embolism[4]. Daphne was put on a specific physical therapy plan of treatment and after a few weeks of therapy with the great folks at her family Veterinarian's office, she was back on her feet and running. Before MRI was widely used in Veterinary medicine, it would not be uncommon for a dog with Daphne's severe symptoms to be humanely euthanized immediately.

[4] Fibrocartilaginous Embolism (FCE) http://www.veterinarypartner.com/Content.plx?A=1663

Meet Milly

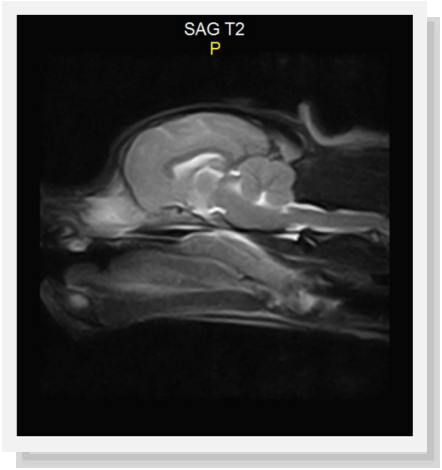
Patient: Milly

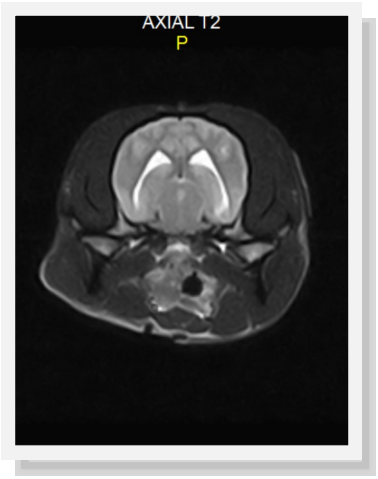
Breed: Boston Terrier

Age: 8 years

Gender: Female

Symptoms: Seizures





Milly's owner brought her to the veterinary hospital after she started having seizures. Her first seizure was two weeks prior to the visit. Last week she had another seizure and yesterday she experienced three more. Milly does not have any other known health conditions and does not take any medication. The seizures were incredibly frightening and a complete shock to Milly's owners. An MRI scan was immediately ordered to rule out a brain tumor. Just like in human medicine, MRI is the veterinary tool of choice to diagnose the cause of a seizure. Until recently, veterinary seizure patients did not have convenient or affordable access to MRI. Thankfully MRI is now much more readily available and is now the diagnostic tool of choice when treating seizure patients. Prior to the routine use of MRI, dogs who experienced a seizure were routinely prescribed oral medication. Unfortunately, medication does not control seizures when a dog is suffering from a brain tumor. Sadly, in years past, dogs suffering from tumors were sent home and experienced additional and progressively more severe seizures. In cases where there is no tumor, treating the patient with medication is often helpful. We are happy to report that Milly's MRI scan came back normal and she is successfully being treated with anti-seizure medication.

Meet Sasha

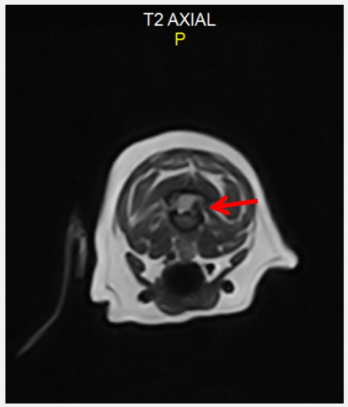
Patient: Sasha

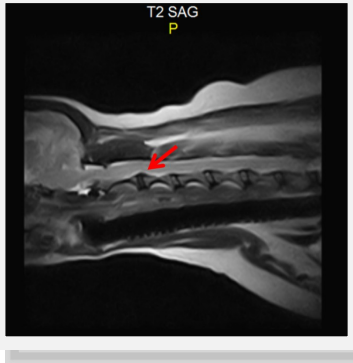
Breed: Dachshund

Age: 7 years 7 months

Gender: Female

Symptoms: Holding head down and screaming out. Also lifting up left paw.





Sasha's owner brought her to the emergency veterinary hospital after she began holding her head down and lifting her left paw up. Her owners explained that the symptoms came on suddenly and they did not recall any recent injury. Sasha was clearly in pain and her owners were just beside themselves with worry. During the physician examination, Sasha continued to scream out in pain. X-rays of her spine were taken but they came back inconclusive. The Veterinarian suggested that Sasha undergo an MRI scan. MRI is excellent at differentiating soft tissue and is the gold standard in diagnosing conditions related to disease of the spine. An MRI was performed and Sasha was diagnosed with Intervertebral Disk Disease (IVDD). IVDD is a hereditary disc herniation disease, not an injury. It is more common to find this condition in dogs, such as Dachshunds, with dwarfed legs. IVDD causes spinal discs to lose moisture and harden, therefore the discs age prematurely and become more susceptible to herniation[5]. The MRI revealed that, in addition to IVDD related herniation at C2-C3, Sasha was also suffering from left-sided herniation causing compression on the spinal cord. Since Sasha's condition was quickly diagnosed, the proper course of treatment was immediately put into place and she is now comfortable and pain free.

[5] Clark's Fast Facts: Intervertebral disc disease (IVDD) http://users.cyberport.net/~milnerwm/fastfacts.html

Meet Jasmine

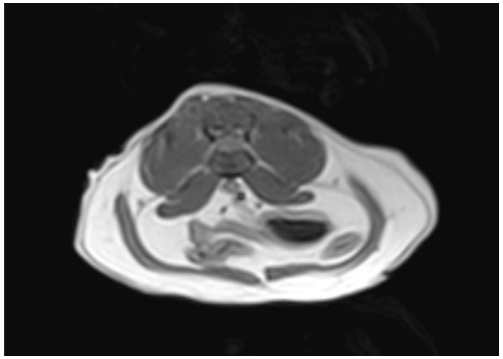
Patient: Jasmine

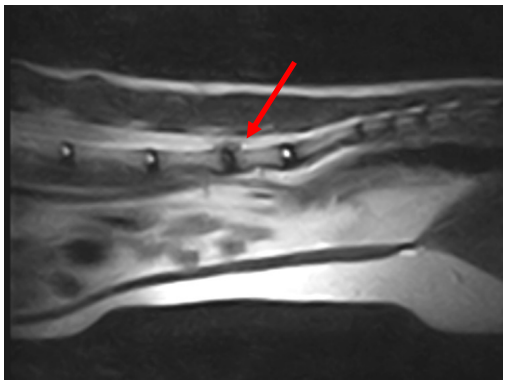
Breed: Domestic short hair

Age: 9 years

Gender: Female

Symptoms: Tail limp and walking on her hocks





Jasmine is a sweet cat and for the first 9 years of her life she only required routine preventative care from her family Veterinarian. When Jasmine's owners noticed that her tail was limp and she was walking on her hocks they were quite concerned that she was experiencing symptoms related to a serious neurological condition. They immediately took her to their family Veterinarian where it was explained that Jasmine's symptoms were consistent with a few different serious conditions, including a stroke or tumor. Jasmine was immediately referred to a Veterinary Neurologist at a local specialty hospital where a spine MRI was recommended. After careful consideration, Jasmine's owners agreed to have the scan done and Jasmine received an MRI that afternoon. The Neurologist was delighted to share the findings with the family. Although Jasmine was suffering from a herniated disc, the diagnosis was far more favorable than some of the other possibilities. The Veterinarian was very optimistic that she could make a full recovery. The Neurologist surgically repaired the disc and Jasmine is now back to her old self. Her family is just thrilled to see her back in action. The family dog, Barnaby, on the other hand isn't as enthusiastic. After a little "coaxing" by Jasmine, he surrendered back her favorite seat at the living room window.