

## Pet Owner Information and Instructions

### What is MRI and what is CT?

MRI stands for magnetic resonance imaging and CT stands for computed tomography. They are both advanced imaging modalities that have been safely used in human medicine for the last forty years and in veterinary medicine for over twenty years. Both MRI and CT are non-invasive and are not painful.

Please note, that CT is only available through BAVI at our Leesburg facility.

### How does an MRI work?

Unlike X-rays and CT, MRI does not use ionizing radiation. Instead, it uses magnetic fields and pulses of radio waves to temporarily and harmlessly energize molecules in your pet's body. As they relax, these energized molecules give off a signal that's made into an image. MRI allows us to image patients in all three dimensions (transverse, coronal and sagittal) in very thin slices, giving us a remarkable representation of your pets anatomy and any pathology that is present.

### How does a CT work?

You may know that an X-ray is a two-dimensional picture created from ionizing radiation. A CT scan is a three-dimensional representation of an object formed from a series of two dimensional X-rays. CT uses a rotating X-ray tube to also take very thin "slices" though an object, adding the dimension of depth.

Please note, that CT is only available through BAVI at our Leesburg facility.

### Why has an MRI or CT been recommended for my pet?

MRI and CT are powerful imaging modalities. They have different applications, although there is some overlap. We rely on our knowledge to make an informed decision as to which imaging technique to use based on the patient's signalment (breed, sex, age), patient history, region to be imaged, discussion with the referring veterinarian, and, if needed, consultation with a radiologist or other specialist. A general rule of thumb is that MRI is an excellent imaging modality for soft tissue structures and CT is more useful for imaging bone. We can image areas such as the sinus cavities, skull, brain, spinal cord, intervertebral disks, abdominal organs, lungs, muscles, nerves, tendons, ligaments, and joints with much more detail than the average X-ray. The results of the MRI or CT will help your veterinarian make a definitive diagnosis and offer you the best options for treating your pet.

### How do I schedule an MRI or CT?

Your veterinarian must contact us to arrange a referral. Once a referral has been arranged, you may then schedule an appointment directly with us. Appointments are scheduled in the morning Monday through Friday. If your pet is to have a MRI or CT, we will have you leave him or her with us for the day. We prefer to have patients picked up by 4:30 p.m., but if it is more convenient for you to leave your pet after hours or overnight, arrangements can be made to board them for an additional fee. If needed, you may wait during the imaging study. Please notify the receptionist when scheduling the appointment if you are planning to wait.

### **How should I prepare my pet for the MRI or CT?**

Pets having an MRI or CT must be anesthetized so that they remain still for the exam. In preparation for general anesthesia, they should not eat within 6 hours of their appointment. Your pet may have access to water until you leave your home. If your pet requires more frequent meals due to a medical condition like diabetes or an insulinoma, please contact our office to discuss prior to your appointment. Ask your primary care veterinarian for instructions if your pet is on any medications.

### **What should I bring to the appointment?**

We will take care of obtaining your pet's pertinent medical information from your primary care veterinarian. Please just e-mail us a copy of the client forms you can find on this website prior to your appointment so we can make sure we are able to fully prepare for your pet's appointment. You can find the forms by clicking on the tab labeled "Client Information and Forms" under the heading Pet Owners. The appropriate e-mail addresses can be found under the "locations" tab.

### **What should I expect during the MRI or CT?**

Your pet will be anesthetized between 30 minutes and 2 hours for the imaging study. The length of the study depends on the modality (MRI vs CT) that is used, if any additional procedures are being performed on your pet after the imaging study, and how many regions we are imaging. Before any anesthesia is given, we will make sure that your pet is healthy enough to undergo anesthesia. We will place an intravenous catheter and your pet will get fluids throughout the procedure. All vital signs will be carefully monitored during and after the anesthesia.

### **What happens to my pet after the MRI or CT?**

After the MRI or CT, your pet may be disoriented and off-balance for about half an hour. We will watch your pet closely until it has recovered. Once your pet is standing and able to move around safely, we will send it home with you. If your pet is getting a CT, it is common for us to keep your pet for approximately 2 hours after the CT is completed so that your pet can receive additional IV fluids to help flush out the contrast agent. Your pet may have to urinate more frequently after it gets home because of the fluids given during and after anesthesia. Once home, it will be important to keep your pet away from stairs and furniture until it has fully recovered so that your pet does not hurt itself. Your pet should be back to normal the morning following the scan. We will send you a full set of discharge instructions and also will verbally discuss them with you when we return your pet to you.

### **How do we proceed after the MRI or CT?**

After the MRI or CT, the images will be read by a highly-qualified, board-certified veterinary radiologist. Results of the MRI or CT will be returned to your primary care veterinarian's office within 72 hours after the appointment.

### **Where are you located?**

You can find directions to all our locations at [bushvetimaging.com/locations](http://bushvetimaging.com/locations).