What is a MRI and what is a 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 over 30 years and veterinary medicine for over 20 years. Both MRI and CT are non-invasive and are not painful.

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. Like CT, MRI is also three-dimensional as it takes "slices" through an object, adding the dimension of depth.

How does a CT work?

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

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 primary care veterinarian. 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 primary care veterinarian make a definitive diagnosis and offer you the best options for treating your pet.

How do I schedule an MRI or CT?

Your primary care veterinarian must contact us to arrange a referral. Once a referral has been arranged, you may then schedule an appointment directly with us.

After arrival

- 1. our veterinarian answers Your questions and figure out a routine physical examination before anesthesia.
- 2. After implantation of an intravenous catheter, Your pet will be anaesthetized and intubated.
- 3. CT/MR examination
- 4. After diagnostic imaging the pet get into the recovery room to wake up. During the recovery period You will get a short presentation about the examination.
- 5. When the animal is fully awake, is ready for the home-way

6. The images will be read by two highly-qualified veterinarian ("double reading"). Results of the MRI or CT will be returned to You and Your primary care veterinarian's office within 72 hours after the appointment.

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 the night before the exam. It is all right for them to have water available until two hours prior to their scheduled appointment time. Ask your primary care veterinarian for instructions if your pet is on any medications.

What should I bring to the appointment?

We will ask your primary care veterinarian to e-mail us a copy of the medical record or You should bring the previous results of the animal. However, if your primary care veterinarian has any X-rays that they are unable to mail to us in time for the appointment, we ask that you please bring these with you.

Before imaging, You should read and sign a statement, that You are agree with the examination and it's costs, You understood the risks.

Is it necessary to carry out MRI or CT in general anaesthesia?

Your pet will be anesthetized between half and one hour for the imaging study to avoid the artefacts originating from movements. Before any anesthesia is given, we will make sure that your pet is healthy enough to undergo anesthesia. 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 20 minutes- 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.

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.

Service and costs

The cost of the diagnostic imaging depends on the size of the animal, the number of body regions must be tested, the need of contrast medium etc. After consultation of Your primary care veterinarian we can calculate the exact cost.

The price is including

- 1. The animal preparation for anesthesia
- 2. Intensive monitoring before, during and after the imaging procedure
- 3. The reading and forwarding of the result.