

Computer Aided Tomography (CAT) Scan – What to Know & Expect

Also referred to as computed axial tomography and computer aided tomography, a CT scan uses a narrow X-ray beam that circles around one part of your pet's body. This provides a series of images from many different angles. A computer uses this information to create a two-dimensional picture, like a slice of bread, of the inside of the body. This process is repeated to produce a number of slices. The computer can stack slices, creating a three-dimensional image, like a loaf of bread. This can create a better view of organs, bones, or blood vessels. A CT scan makes it possible to diagnose certain diseases earlier and more accurately than with other imaging tools. This procedure is commonly used to view the brain, sinuses, inner ear, teeth, orbit, intervertebral discs, bones, joints, spine, chest, abdomen, and soft tissues.

In a CT scan, dense substances like bones are easy to see, but soft tissues do not show up as well. To help them appear more clearly, a contrast material may be administered intravenously to highlight blood vessels, organs, or other structures.

A veterinarian may recommend this test to examine an area where your pet is experiencing pain/discomfort, monitor the progress of a condition, or check how well a prescribed treatment is working. Your pet may receive a CT to:

- Detect bone and joint problems, like complex fractures and tumors, or developmental diseases.
- Spot and/or monitor conditions such as cancer, lung disease, or liver shunts.
- Show internal injuries and bleeding such as those caused by a trauma (i.e, hit by car).
- Locate a tumor, blood clot, excess fluid, or infection.
- Guide treatment plans and procedures, such as biopsies, and surgeries.
- Confirm the presence of periodontal disease.

Preparation: Read our [Client Preparation Guide](#) to prepare for your pet's appointment. This procedure requires your pet to remain relaxed and motionless for a period of time, and will require sedation and/or anesthesia. For further information, refer to our [Sedation and Anesthetic Fact Sheet](#). We also recommend all of our clients become familiar with our [Terms and Conditions](#).

Process: Scheduled procedures, your pet must be admitted for the day.

1. During admission, we will ask you to sign consent forms for the procedure and address questions you may have.
2. Once admitted, a veterinarian will evaluate your pet, their medical history and lab work, and any radiographs (if applicable).
3. An intravenous catheter will be placed in a leg vein for the administration of anesthetic agents. This requires hair clipping at the site. In rare circumstances, a small area on your pet's chest may also be shaved to place a patch that monitors heart rate.
4. Your pet will then be moved to the imaging suite, positioned, and scanned. A specially trained registered veterinary technician will be with your pet during the whole process to monitor their health status.
5. During the procedure, your pet may be placed in various positions to obtain the best quality pictures.
6. Afterwards, your pet will be brought to our intensive care unit, where a team of veterinarians and registered veterinary technicians will continue to monitor your pet during their recovery.
7. Once a veterinarian has determined that your pet is cleared for discharge, we will call to inform you that your pet is ready to go home.
8. After evaluating all of the information, the radiologist will then be able to make any recommendations on treatment, medication, and/or further diagnostics, and will provide a report to your veterinarian within 24 hours. Your veterinarian will discuss the CT findings with you.
9. If additional procedures are required (aspiration or biopsy), you will be contacted prior to the procedure and the benefits/risks and associated costs will be discussed. Any additional results will be forwarded to your veterinarian when they are received.