



## An Introduction to Portal Scintigraphy

Nuclear scintigraphy (also known as nuclear medicine) is the imaging specialty that involves the use of radioactive isotopes in the diagnosis and treatment of disease.

In nuclear medicine, a radioisotope is introduced into the body. The isotope is then taken up in different amounts by different organs. A diagnosis is made in nuclear medicine by imaging the distribution of the radioactive element within the body. Radiation emitted from the radioisotope is detected by a scintillation counter (this is why nuclear medicine is referred to as nuclear scintigraphy) and an image of the radioactivity is produced.

A portal scan is a procedure that can help us determine if your pet has a portosystemic shunt. A portosystemic shunt is an abnormal blood vessel that routes blood away from the liver. As a result toxins in the blood are not filtered by the liver and accumulate in the bloodstream.

A portal scan is painless for the patient but sedation may be necessary to prevent motion during the scan. A portal scan is performed by introducing the radioisotope into the colon through a small tube. Your pet will be gently positioned on our gamma camera where we will obtain images of the pathway the radioisotope takes through your pet's body.

We ask that you do not feed your pet after 3 p.m. the day before the study. Water is permitted. We will feed them as soon as we can after their study. Most of our patients will be released the same day as their procedure, but some may require overnight hospitalization. We cannot release your pet to you immediately after their procedure because we need to allow the radioactivity to decay before they are released from the hospital in accordance to California State law. This 'holding period' is required to allow the radioactivity to decay before the patient is released from the hospital.

When you return to pick up your pet, you will be given preliminary findings from the study. One of our technicians will discuss the images from the portal scan with you and one of our doctors will contact your veterinarian. A written report and the images from the study will be sent your veterinarian.