

Nuclear Scintigraphy

Nuclear Scintigraphy or Bone Scanning is the most commonly performed equine nuclear medicine procedure because it offers high sensitivity for detecting early disease. In addition, it allows veterinarians to evaluate the entire equine skeleton (or a region) making it an ideal tool for diagnosing difficult or multi-factorial lameness. Nuclear scintigraphy is an imaging modality that emphasizes physiologic processes – it is the physiologic evaluation of bone metabolism. Bone scanning is especially useful in detecting bone inflammation when lameness is difficult to diagnose or when the complaint is that the horse is not performing up to his/her athletic expectations. A bone scan is a much more sensitive than radiographs in detecting lameness related to bone inflammation. At Virginia Equine Imaging, we provide state of the art nuclear medicine services complete with motion correction software.

Frequently Asked Questions About Nuclear Scintigraphy

When should I bring my horse into the clinic for his/her scheduled procedure?

- During cold weather months we prefer the horse arrive the night before the scan to insure it is kept warm in our temperature-controlled stall.
- During warm weather months, it is important to arrive at the clinic by 7:00am on the morning of the procedure as the dose of the radioisotope is specifically calculated for this time.
- First, check in with the receptionist at the front desk to relay any new pertinent history related to the case. Be certain to make the vet tech aware of the horse's current exercise regime, and any medications that the horse has received prior to the visit.
- Bring any prior veterinary medical care information to our offices related to your horse's lameness including: prior lameness work-up history, radiographs, ultrasound images, thermography images, etc.
- Bring your horse's am and pm feed, and fill out the feed instruction form provided by the office.
- Next, place your horse into an assigned stall in the main clinic.
- Standing wraps need to be put on the night prior to the bone scan, as the image quality is improved when the horse's body temperature is kept uniformly warm. In the winter months, please put a blanket on in addition to the wraps to keep the horse warm.

How is the bone scan performed?

- The morning of the bone scan the patient is exercised on the lunge pad, if appropriate, then injected intravenously with the short acting radioisotope Tc 99 MDP, linked to a bone tracer agent. The patient is then stabled in a secure stall for approximately 2 hours while the radioisotope circulates systemically throughout the horse's body. The horse is next tranquilized (standing sedation) and imaged with the gamma camera. Areas of bony inflammation are indicated in the computerized pictures

as areas of increased uptake and described as focal or diffuse and mild, moderate or intense.

How long does the procedure take?

○ Depending on whether a hind-end, front-end or full body bone scan is performed, the procedure usually takes several hours. Therefore, the bone scan images are often not read by the doctors until the late evening or early the following morning. After reviewing the images, the doctors devise the best plan for more extensively working up the lameness including: additional nerve blocks, intra-articular injections, digital radiographs, ultrasound, etc. Prior to the work-up and therapeutic treatments, the owner will be contacted to discuss the bone scan findings and further diagnostic options.

When is it safe for my horse to go home following the procedure?

○ The Tc labeled radiopharmaceutical is cleared through the renal system (kidneys, urine); therefore, it is necessary to keep the patient in a secured location for 24 hours to reduce radiation to personnel involved in the work-up of the case.

****Due to the nuclear scintigraphy radiation regulations, clients are unable to observe the procedure. Authorized personnel only are allowed to handle the patients after the isotope has been injected and throughout the procedure.****

How is the information recorded?

○ Following the bone scan, images from the procedure will be printed and a formal letter outlining our findings will be prepared for the client as well as the referring veterinarian.

Can I leave my trailer overnight?

○ Yes, please back in facing the clinic and be as space conscious as possible.

Costs-The items below will be performed at the Nuclear Scintigraphy Examination:

- Office call: \$55.00
- Hospitalization: \$70.00
- Sedation: \$110.00 (multiple doses)
- Isotope: \$565.00

If for any reason the bone scan needs to be cancelled or rescheduled, it is imperative to inform our office so that we may cancel the isotope order before the conclusion of our business hours (8:00am – 5:00pm) of the day prior to the scheduled bone scan. The charge of the isotope will be \$565 if the dose is not cancelled.

Lameness Work-up: Variable Pricing

Nuclear Scintigraphy Exam Costs:

- Whole Body: \$1250.00
- Front End: \$910.00
- Hind End: \$910.00

In many cases, but not all, the nuclear scintigraphy procedure is financed by your horse's insurance company. Therefore, it is important to contact your insurance agency prior to the examination, and provide us with the appropriate paper work.

Virginia Equine Imaging

Nuclear Scintigraphy Information Sheet – Please fill out, sign, and fax back to: (540) 687-4665 or email to vaequinimaging@gmail.com

Date of Nuclear Scintigraphy Exam: _____

Owner Name: _____ Horse Name: _____

Address: _____ Breed: _____ Age: _____

City, State, Zip: _____ Sex: _____ Color: _____

Phone# _____

Phone# _____

Referring Veterinarian: _____

Would you like this information shared with the referring veterinarian? YES or NO

Credit Card Name/ Number/ Expiration Date/ CVV:

NOTE: It is VEI policy to have credit card information prior to the Nuclear Scintigraphy examination date. Your credit card will be charged at the end of the day the horse is discharged, unless you prefer to pay by check in person at the time of the exam. By signing this form, you authorize your credit card to be charged. If you will be sending a representative or agent in your stead you will be expected to pay for all financial decisions made on your behalf by the representative or agent (trainers, veterinarians, etc...)

Signature

Date