

MRI
Equine Lameness
& Imaging Service



University of Florida Magnetic Resonance Imaging (MRI) for the Horse

What is magnetic resonance imaging (MRI)?

MRI is an imaging method that demonstrates abnormalities in bone and soft tissue with greater precision and detail than possible with most other methods, such as radiographs or ultrasound. MRI provides more accurate diagnosis of a variety of diseases, including osteoarthritis, bone bruises, joint inflammation, tendon and ligament injuries, and joint infection.

When would my veterinarian request an MRI for lameness?

Most requests for an MRI are for cases when other diagnostic procedures are inconclusive. MRI can produce extremely detailed images of abnormal musculo-skeletal structures that cause lameness. When these images are acquired and interpreted by board-certified veterinary radiologists and surgeons, difficult and precise lamenesses can be diagnosed, leading to a more accurate treatment plan.

Are there different types of MRI units?

Yes. More powerful, or “high-field” MRI units require horses to be completely anesthetized because they must be laying down in order to fit into the opening of the unit and be completely still to acquire high-detail images. Less powerful units, or “low-field,” like standing MRIs, require sedation of the horse, but don’t provide the same detail in images.

Toshiba Titan 1.5 T MRI

- The horse is anesthetized and placed on a special table made for MRI.
- The leg being imaged is placed in the middle of the opening of the unit called the bore, which is made of magnetic coils that create and emit a magnetic field.
- The electromagnets realign charges of protons in the body which release energy which the MRI transforms into images.



MRI image of distal limb

The UF Veterinary Hospitals’ MRI unit is a Toshiba Titan, ultra-wide bore high-field 1.5 Tesla magnet and images are obtained by board certified veterinary radiologists and surgeons.



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