

An underutilized scan sequence is the region of interest bone scan. The number of images obtained is limited to ten, but a specific area can be evaluated scintigraphically in a more cost effective manner. This is often utilized after the lameness has been localized with anesthesia. Region of interest bone scans can be utilized to better evaluate suspicious pathologies, such as cervical spine abnormalities/facet joints, bone components to proximal suspensory disorders, and possible bone bruising.

Indications for nuclear medicine in the horse include the following:

- Localization of pain to a region, but an inability to identify the potential cause of pain using radiography and/or ultrasonography. In this case, a pool and/or bone phase may be indicated.
- Collaboration with the possible significance of an equivocal radiographic abnormality.
- An acute onset of lameness and a clinical suspicion of a fracture or stress related bone injury that cannot be identified radiographically.
- Failure to localize the source of pain using a local anesthetic technique.
- The inability to perform local anesthesia due to fractious nature of the horse.
- Lameness in multiple limbs making local anesthesia techniques difficult to interpret.
- A race horse or sport horse with a history of lameness at high speed or during work, which is not evident in hand.
- An intermittent lameness that cannot be reproduced in order to perform local anesthetic techniques.
- A suspected thoraco-lumbar or pelvic region pain.
- Poor performance or an ill-defined cause of the lameness.
- Monitoring convalescence.
- Challenging dental cases to determine the significance of questionable radiographic findings.