



SCINTIGRAPHY IN HORSES

Kay Burt Equine Therapy



HORSE OWNER FACT SHEET #1

APRIL 2018

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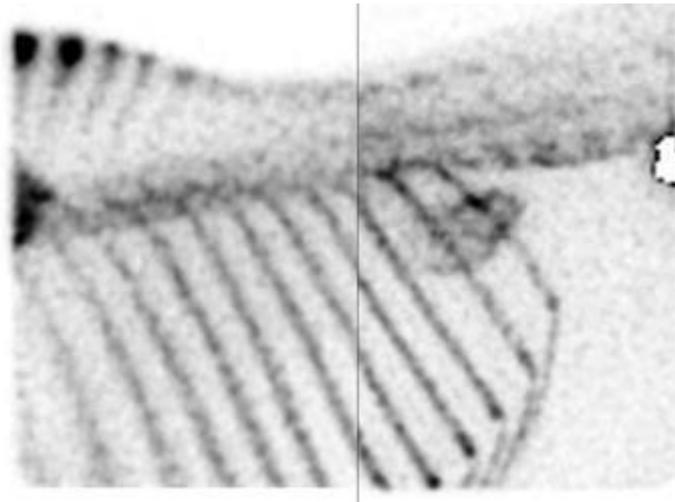
Why Does My Horse Need a Scintigraphy?

A nuclear scintigraphy, or *bone scan* as it's commonly referred to, can play a vital role in the orthopaedic diagnosis procedure. Depending on the history of the horse, symptoms presented and results of preliminary testing your veterinarian may recommend your horse go for a bone scan. As we know lameness issues aren't always straight forward when it comes to horses so to avoid carrying out unnecessary tests on your horse a bone scan may be the best way to go. A bone scan will show areas of abnormalities before they present on X-rays, so this sensitive piece of technology is vital for those cases where fractures are suspected, or if the area of concern is not accessible by other modalities such as the back or pelvis.

Some horses that present with numerous issues will be referred straight away for a bone scan. This allows the veterinarian dealing with your horse an opportunity to gather more information before deciding where to investigate further. For example, those scenarios where the horse presents with a multiple limb lameness or poor performance without an apparent lameness. In situations where your horse may already have some investigations carried out, but the results showed no substantial difference via nerve blocks or radiographs make good candidates for nuclear scintigraphy. This will save time, money and unnecessary investigations on your horse. Remember horses are great at compensating so the area of concern may not be where you think, so this modality provides the veterinarian with more information before using up vital insurance money that could be used for treatment.

What Is Involved In A Bone Scan?

A radioactive substance is intravenously injected into your horse. The substance is then absorbed into the horse's bloodstream and taken up throughout the body. A specialised camera is then used to scan the area of interest or the whole body depending on which option you opt for. The radioactive substance is taken up in areas where there is an increase in metabolism, emitting gamma rays which are picked up by the camera and appear on the screen, like the following picture. This imaging procedure can pick up increased bone activity and this is referred to as *hot spots*. The degree of concentration is dependent on the significance of the issue, as well as, the time the drug has been active within the horse. This is a non-invasive and painless procedure that has no lasting effect on the horse. This is one of the most expensive imaging techniques so remember if you opt for the whole body scan the costs do increase but you will gain a greater overall picture compared to imaging one area.



A scintigraphy image (Rossgdales Hospital)

Can I Stay and Watch?

Despite this procedure being quite a common practice in most equine hospitals protocols are in place to keep the amount of human interaction with horses that are undergoing this type of investigation kept to a minimum, due to the radioactivity. Therefore, you will not be allowed to stay and watch. Some hospitals will dedicate a few select members of staff to handle these horses to avoid contamination with other patients. Due to the radioactivity your horse will need to stay in overnight to ensure they are no longer reactive before leaving the premises.



What Happens Now?

The location and severity of the hot spots shown will determine what happens next. Just like other diagnostic procedures it is used in conjunction with the history of the horse and left to the interpretation of the veterinarian dealing with the case. Remember the areas that show as hot spots aren't necessarily linked with pain, just areas with an increase in activity. So, it's down to the veterinarian in charge to establish the relevance of what is shown on the scintigraphy scan. Sometimes there will be areas of up take that aren't significant enough to warrant further investigations but those that are will be investigated further using other modalities such as radiographs or ultrasonography.

If you are struggling to pin point your horse's lameness and other tests haven't shown a reason have a chat with your veterinarian and discuss the use of a bone scan. *Just like other imaging testing it's best to check with your vet whether you need to keep your horse in full work on the lead up to the scan to ensure findings aren't hidden due to rest.*

Remember insurance companies in the UK will only pay for the diagnostics and treatment, so the boarding costs of your horse having to stay in overnight will not be covered