EQUINE FACTSHEET: BONE SPAVIN

The equine hock is a complicated structure consisting of several joints, of which the upper Tibio-Tarsal joint contributes around 95% of hock motion.


The lower two main joints in combination provide only about 5% of the active movement but are under constant compressive forces from the horse’s weight. The lowest joint, the Tarso-Metatarsal joint is most commonly affected by osteoarthritis. “Bone Spavin” is the popular term for osteoarthritis affecting the lower hock.

Lateral View of the equine hock
1. Tibio-tarsal Joint
2. Proximal Intertarsal Joint
3. Distal Intertarsal Joint
4. Tarso-metatarsal joint

Risk Factors
Activities which place uneven or excessive forces on the hock may predispose an individual horse to developing bone spavin. Athletic activities such as dressage, showjumping and racing may increase the likelihood particularly if forces are transmitted unevenly through the joint due to conformational abnormality or poor foot balance.

Symptoms
Initial signs may include a subtle hindlimb lameness or stiffness which improves with exercise. The horse may become reluctant to do particular activities such as going downhill, striking off into canter or jumping. Typically the lameness worsens over time and usually affects both hindlimbs, although one may be worse than the other.

Diagnosis
Should you call us out to investigate lameness in your horse we may like to see him walk and trot in straight lines and on the lunge on different surfaces to highlight certain types of lameness. From this we may elect to flex the limb in order to place strain on a particular region. Typically with bone spavin, lameness would appear worse after flexing the hock for 60 seconds. A positive hock flexion test would be suggestive of bone spavin but to confirm the diagnosis we often elect to anaesthetise the joint with local anaesthetic. Should this markedly improve the lameness we can be confident that we have located the source of discomfort.

Performing a flexion test
We can then use X-Rays to stage the progression of disease, our digital X-Ray machine can get very good images on your yard. The characteristic changes that we see are osteophytes, or boney spurs, where bone has proliferated in response to repeated overloading. These changes reflect the reaction that we believe to cause the discomfort and reduced athleticism associated with bone spavin, as new bone is deposited down in a restricted space. This can strain surrounding soft tissue structures and erode the cartilage which should provide a smooth gliding surface between joints.

**Treatment**

Once boney changes have occurred they are irreversible but the symptoms of bone spavin can be managed via several methods. Each case is managed as an individual, but may receive a combination of the following treatment options:

- A controlled exercise regime, consistent daily exercise is often indicated once initial treatment has been completed
- Remedial farriery
- Oral Non Steroidal Anti Inflammatory drugs (Most commonly "Bute" or Danilon)
- Injection of Anti Inflammatory drugs directly into the affected joint
- An intravenous drip of a drug to slow bone remodelling
- Surgical fusion of the affected joints is occasionally indicated

**Prognosis**

Prognosis varies depending on several factors including the severity of changes and how rapidly the lameness is progressing. Many affected animals may return to their previous level of athleticism possibly with ongoing treatment, such as oral Anti Inflammatory medication or repeated anti-inflammatory injections into the joint. Horses competing at a high level may be required to scale down their competitive careers.