

# Shoeing For Bone Spavin in the Hind Limb

J.T.Ferrie F.W.C.F

## Bone Spavin

Bone spavin is osteoarthritis of the small hock joint; the hock comprises six bones in a complex array of articulations, the main ones being the proximal (top), central (middle) and distal (bottom) articulations. It is generally the inside of the distal articulation where bone spavin is found.

The joints involved are low motion type joints, in contrast with the tarsocrural joint which is a high motion joint and responsible for most of the flexion/extension in the hock.

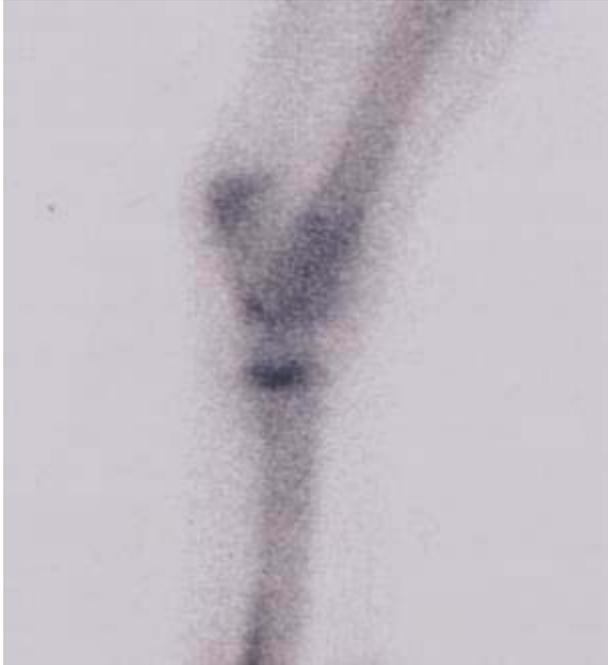


Bone Lysis on X ray



Typical stance for acute bone spavin

The degenerative joint disease of these low motion joints can cause lameness of varying severity and often bilateral. It is most commonly seen in mature horses of all breeds.



Bone spavin is not uncommonly associated with poor conformation, and it is believed that sickle hocks or cow hocks predispose to spavin.

Hot Spot showing bone spavin during scintigraphy

If lameness is present, specific analgesic techniques are used to localise this to an anatomical region in the hind limb.

The most common cause of clinical lameness associated with the tarsus (hock) is bone spavin and remedial farriery is often part of the treatment.

Horses with bone spavin are often presented to a veterinary surgeon with suspected back pain causing reduced performance.

The diagnosis is generally based on a combination of a positive result to joint blocks (intra-articular analgesia), radiography and sometimes a bone scan (nuclear scintigraphy).

Treatment of the condition is aimed at eliminating pain and keeping the horse useful, rather than restoring normal function of the joint. Surgical and non surgical treatments have been used in conjunction with corrective shoeing.

Conservative treatments consist of intra-articular medication, adaptation of the horse's exercise routine (there is no benefit to be gained from rest only) and/or corrective shoeing. Several shoeing techniques can be prescribed, of which lateral (outside) extensions or trailers, or heel elevations and rolled or squared off toes are most commonly used.

The lateral extension is used in an attempt to make the horse more comfortable, by changing the weight distribution. Horses with spavin attempt to unload the dorsal (front) aspect of the small tarsal joints by redistributing their weight.

I have found that horses with acute bone spavin tend to carry the lame leg in a fashion that will take as much strain off the medial aspect of the tarsal joint as possible, which leads to a distortion of the hoof capsule.



Lateral extension shoe



Lateral extension with medial wedge

The action of each affected horse can vary depending on the severity of the condition and the conformation of the horse. A good way of determining the placement and width of the extension/trailer required, is to watch the animal move and place the extension just behind the first point of contact between the hoof and a level surface. This is known as the point of “stab” . Such placement will widen the stance and gait and take some strain off the hock. Should level footfall not be possible at this time, a medial wedge can be used. The height of which is often gradually reduced as the swelling and pain recedes.

Remedial farriery can be used together with long-term systemic administration of non-steroidal anti-inflammatory drugs (phenylbutazone) with varying results. More predictably successful, but rarely permanent, is intra-articular medication with corticosteroids.

Lameness is improved in most horses treated with these substances but will often recur in 2 to 6 months.

Should the joint actually fuse (this is known as ankylosis) then a shoe which will accelerate the break-over phase of the stride should be applied.





Square Toe Shoe

Trailer shoe with wedge

This can take the form of a Square toe shoe. Or a rolled toe shoe.

Personally, I tend to shy away from graduating the heels, as, unless this is combined with frog support, it causes the heels to be crushed as the foot tries to function normally.

I treat each case individually with no set shoe in mind until I have assessed the horse. Often the shoe will change as the pain in the joint decreases at each shoeing cycle.