XL Vets Equine

Fact Sheet

Sidebone

The lateral cartilages of the hoof are found on either side of the foot protruding above the level of the coronary band. They act to support the hoof wall and provide an important role in cushioning the heel during weight bearing. The term 'sidebone' describes a condition where calcium deposits are laid down within the lateral cartilages, in a process called mineralisation. This can become bone-like in a process known as ossification.

Once ossification has occurred, the lateral cartilages become less flexible and this may cause pain. If a fracture of an already formed sidebone occurs, this may cause a sudden and obvious lameness. Sidebone may also cause pain in the ligaments of the coffin joint.

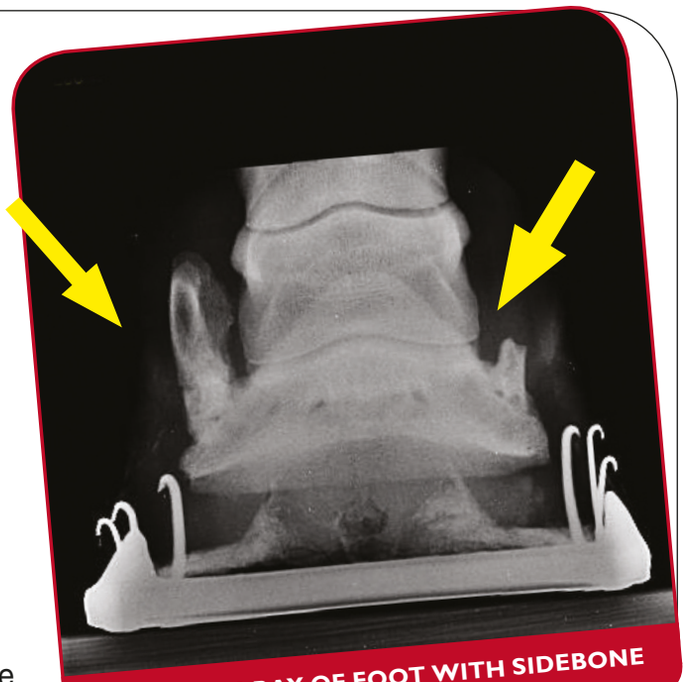

FIGURE 1: X-RAY OF FOOT WITH SIDEBONE

Causes of Sidebone

Sidebone is believed to result from concussive forces travelling through the foot during weight-bearing causing trauma to the collateral cartilages.

This process tends to affect the front feet and is more common in older horses. The heavy breeds are more often affected.

Long-term foot imbalance also plays a role in the formation of sidebone, as does poor limb conformation.

Sidebones can be felt just above the coronary band at the quarters of the foot (figure 2). The diagnosis is confirmed using x-rays (figure 1).

The presence of sidebone can be an incidental finding; despite its presence on an x-ray it is frequently not the cause of lameness.

When lameness occurs as a consequence of sidebone formation, it is because the rigid structure is pressing on the sensitive hoof structures causing pain. Nerve blocks and MRI can be helpful tools to identify whether a sidebone is 'active' and affecting the horse.

Fracture of an established sidebone can result in sudden and severe lameness.

FIGURE 2: SIDEBONE CAN BE FELT ABOVE THE CORONARY BAND AND QUARTERS OF THE HOOF. THIS HORSE HAS AN ENLARGED RIGHT SIDE ASSOCIATED WITH SIDEBONE FORMATION

Treatment of clinically significant Sidebone:

- address any foot imbalances with trimming and shoeing;
- ensure that the shoeing interval is kept short;
- remedial farriery – a wide-webbed shoe with a rolled toe and wide heels that extend out under the horse's heels will to help support the heels and encourage their expansion;
- anti-inflammatories;
- rest;
- when the horse returns to work avoid hard or uneven going as this will increase the concussive forces through the feet.

Treatment of a fractured Sidebone:

- as above, however the rest period may be significantly extended.

Prevention of Sidebone formation:

- Ensure that your horse's feet are kept well balanced and regularly shod or trimmed.
- Avoid lots of work on hard ground e.g. roads.

Prognosis:

- Lameness associated with mild sidebone formation often ceases once the sidebone has completely formed. If the sidebone is large, and especially if the hoof is deformed as a consequence, the prognosis for a return to soundness is guarded.

KEY POINTS

- Sidebone is mineralisation of the lateral cartilages of the foot occurring most commonly in the forelimbs.
- It is more common in older and heavy horses or those with poor lower limb conformation.
- Associated lameness is uncommon unless fracture of an ossified (bone-like) structure occurs.
- Sidebone can be diagnosed by careful clinical examination and x-rays.
- The lameness often resolves when formation of the sidebone is complete or a fractured sidebone is rested and allowed to heal.

XL Vets Equine

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