Supporting Limb Laminitis in the UK

Using the comprehensive computerised record system at Rossdales Equine Hospital, records for all horses and ponies under the care of the Hospital, Diagnostic Centre or ambulatory practices were searched between January 1, 2005 and November 1, 2013. From a total of 65,327 horse and ponies registered over that time frame, supporting limb laminitis was documented to have occurred in nine horses, one donkey and one pony. Thoroughbreds were the most commonly affected breed (72.7%), animals were aged 2–14 years old, and most were mares (81.8%), with no geldings presented.

Supporting limb laminitis was not restricted to horses that were non-weight bearing lame, and developed within 4–100 days after injury, most commonly after 14.5 days. However, the initial injury was severe enough to require treatment under general anaesthesia in most cases (81.8%).

Supporting limb laminitis occurred following:

- A recently acquired deformity (contracture) of the fetlock
- Laceration of the tendon in the lower forelimb
- Fractures that occurred to either the elbow, knee, pedal and navicular bones, or to the pelvis
- Infections of either the knee, fetlock joint and tendon sheath of the lower forelimb, or coffin joint

Like the more common types of laminitis, supporting limb laminitis occurred most commonly in a forelimb. Sadly, only three of the affected animals survived, with all those euthanised being put to sleep within 50 days of laminitis development.

The frequency of supporting limb laminitis in the overall equine population under the care of Rossdales was very low (0.02%). The study population consisted of all animals under the care of the two ambulatory practices and the referral hospital and diagnostic centre, considered to be the largest equine practice in Europe. Situated in Newmarket, the global centre of Thoroughbred horse racing, it was anticipated that this population of horses would provide an estimation of the frequency of supporting limb laminitis at the high end of the spectrum in the UK, as racehorses may be more likely to undergo expensive surgical procedures to correct severe lameness than the general equine population. Because supporting limb laminitis occurred only very rarely, any future epidemiological studies to try to identify preventive measures for the disease will be difficult to conduct.

The abstract of the paper can be found by clicking on the link below:

**Prevalence of supporting limb laminitis in a UK equine practice and referral hospital setting between 2005 and 2013: implications for future epidemiological studies**

(hyperlink to http://veterinaryrecord.bmj.com/content/early/2014/09/26/vr.102426.abstract)
1. This pony was admitted to the hospital with a severe fracture to his right elbow, which required surgical fixation under general anaesthesia the same day. He developed chronic laminitis in his supporting left fore foot 100 days later, however he responded well to treatment and returned home.
2. This Thoroughbred mare sustained a strike injury whilst in racing training and developed an open wound with tendon laceration in her right fore. The wound was treated under standing sedation the same day. Twenty-one days later she became non-weight bearing lame on her supporting left fore. The above radiograph illustrated the significant rotation of the pedal bone away from the hoof wall, and unfortunately the progression and severity resulted in euthanasia 50 days later.
3. This competition horse developed an infection of her left hind coffin joint that resulted in a very severe lameness. She required two general anaesthetics to investigate and treat the affected area. Three days following surgery she began to develop signs of acute laminitis, that was actively managed within the hospital, however progressed to chronic laminitis. Unfortunately the severe pathology within her left hind, and the painful laminitis in her right hind resulted in euthanasia a month later.