

Study background

Our study has its roots in research that was conducted by Claire Wylie, during a three-year PhD project on equine laminitis funded by World Horse Welfare. Claire worked with Kristien, Richard and Simon, to look at the frequency of, and risk factors associated with, laminitis in a group of animals that were registered with participating veterinary practices.

Frequency of laminitis

This project obtained an estimate of the 'veterinary-reported' frequency of laminitis between the years 2009 and 2011. This study found that active episodes of veterinary-diagnosed laminitis occurred in nearly 1 in 200 horses/ponies registered with veterinary practices, and accounted for nearly 1 in 200 equine visits. These figures were lower than those previously reported for equine laminitis in Britain, however an overall lack of studies into the frequency of laminitis leaves us little to compare them with.

The summary (abstract) of this study can be found here:

- [A cohort study of equine laminitis in Great Britain 2009–2011: Estimation of disease frequency and description of clinical signs in 577 cases](#)

Risk factors for laminitis

Claire and the team also identified 11 risk factors associated with laminitis, from a multitude of others considered, which either increased or reduced the risk of the disease. A number of these risk factors were modifiable – meaning they could potentially be changed by adjusting management – and it is especially these risk factors that we want to take a closer look at, although we may well find others.

A brief summary of the **non-modifiable risk factors** identified:

- **Season** – Laminitis occurred throughout the year although animals were more at risk of getting laminitis in summer and winter compared to spring. This finding especially emphasises that owners should remain vigilant all year.

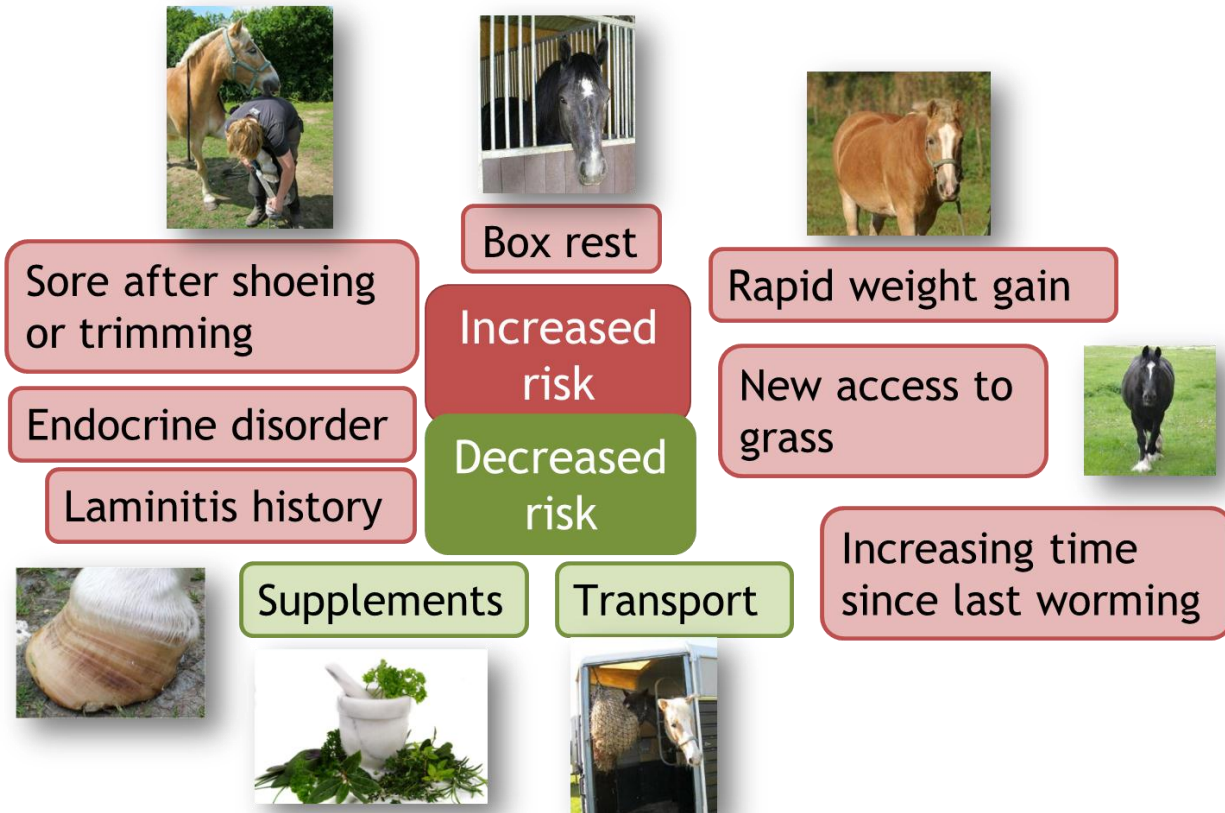


- **Height** – Smaller animals were more likely to develop laminitis than taller animals.



A brief summary of the **modifiable risk factors** identified:

Risk factors for equine laminitis



Endocrine disorders include Pituitary *Pars Intermedia* Dysfunction (PPID or Equine Cushing's Syndrome) and Insulin Resistance (IR)/Equine Metabolic Syndrome (EMS). Especially novel findings were that the feeding of supplements and transport in the previous week appeared to reduce the risk of laminitis, while an increased time since worming increased the risk. The study didn't go into detail about which supplements were fed, only asking owners to indicate if supplements were fed or weren't fed. These factors, especially those that seemed to have a protective effect, will be further investigated in the CARE about laminitis study before we reach any conclusions.

The summary (abstract) of this study can be found here:

- [Risk factors for equine laminitis: A case-control study conducted in veterinary-registered horses and ponies in Great Britain between 2009 and 2011](#)

Claire was invited to present her work at The Laminitis Conference in Florida, USA – you can find a summary of her presentation online at The Horse: [Laminitis Prevalence and Risk Factors in Great Britain](#)

Aims of the CARE about laminitis study

Based on what we now know from Claire's PhD project, the CARE about laminitis study aims to:

1. Estimate the frequency of owner-reported laminitis, for both those horses that are diagnosed by a vet and those that aren't – which we anticipate may be different from the veterinary-reported estimate found previously. We are aware that the estimate in a veterinary-attended and -diagnosed population does not include cases recognised by horse owners only and our study aims to capture these as well.
2. Take a closer look at the previously identified factors which either increased or decreased the risk of laminitis, as well as identifying potential new ones. There is a need to further investigate the factors that were linked to laminitis in the previous study and we can do that by regularly collecting information from a large "cohort" of animals over a long time period. Capturing changes in our animal's environment as they happen, and the occurrence of laminitis, will allow us to create a timeline; ensuring we can be more certain that exposure to a factor actually contributes to laminitis occurring or not occurring. It is essential that we gather a large amount of data on individuals that will develop laminitis and also those that will not, so that we can compare the two groups and establish whether the laminitic animals were more or less likely to be exposed to certain factors when compared to those that never developed the disease.
3. Create evidence-based recommendations based on the results obtained from the study. These can then be used by owners, health care professionals and others involved with equines to help reduce the impact of laminitis in Britain.