

## Session 15

## Theatre 2

### **Findings from a case control study of equine laminitis in Great Britain, 2009-2011**

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There are few high quality studies investigating risk factors for equine laminitis, with most including only a limited number of risk factors and invariably not involving information on management practices. This study aimed to identify risk factors for veterinary-diagnosed active laminitis in British horses and ponies attended by practitioners 2009-2011. A prospective case control study of equine laminitis was conducted nested within a cohort of British equine veterinary practices. Laminitis cases were practitioner-diagnosed and controls were non-affected animals attended by the same practices. Owner-derived questionnaire data on signalment, management and health status during the preceding week. Multivariable mixed-effects logistic regression methods were used to assess risk factors associated with laminitis. A final multivariable model for equine laminitis was derived with odds ratios adjusted for other variables and random clustering of cases and controls within veterinary practices. Factors associated with an increased risk of laminitis were increasing bodyweight in the previous 3 months, summer and winter season compared to spring, new access to grass in the previous 4 weeks, box rest in the previous week, owner-reported history of laminitis, lameness or soreness after farriery, existing endocrinopathic disease and increasing time since last anthelmintic treatment. Factors associated with a decreased risk of laminitis were increasing animal height and feeding of additional supplements and transportation, both in the previous week. This study identified novel factors associated with laminitis among veterinary-attended horses and ponies in Great Britain between 2009 and 2011. With further targeted studies, these findings may improve knowledge on the aetio-pathophysiological mechanisms underlying laminitis and thereby provide opportunities for improving prevention and control of the disease.