JOURNAL OF ANIMAL AND BEHAVIOURAL SCIENCE: VOL: 5, ISS: 2

More than just the feet: an approach to the laminitic horse

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Abstract

Laminitis is a debilitating and potentially life-threatening disease of the equine foot with a reported frequency ranging from 1.5% to 34% [1]. The disease results in profound pain and suffering in affected animals and is widely considered as a leading cause of euthanasia in the horse. It has been estimated that 89% of laminitis cases result from endocrinopathic disease, with 58% specifically attributed to equine metabolic syndrome (EMS) [4]. The Arabian horse has been identified as carrying a risk locus for one such endocrinopathic disease, known as equine metabolic syndrome (EMS), therefore predisposing this breed to development of laminitis [5]. With a population of horses comprising >75% Arabians, with the majority of them being show horses renowned for husbandry conditions predisposing them to laminitis, Dr Johnson has gained extensive experience dealing with laminitic cases, in a wide variety of presentations and severity, during her time spent working at the Equine Veterinary Medical Center in Doha, Qatar, where laminitic patients make up a significant proportion of her caseload. Here, she discusses her approach to a comprehensive investigation of the laminitic horse, including the importance of a thorough history-taking, what to check on physical examination, practical perspectives on clinical pathology, as well as tips and tricks for diagnostic imaging, drawing on recent research in this field. Improvements in our ability to detect subtle changes and to diagnose the condition early in its course, will result in better treatment success and outcomes for our equine patients, thereby improving their health and welfare.

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Figure 1: A comprehensive investigation of the laminitic patient involves not only examination of the feet and radiographs, but a thorough physical examination (left) as well as assessment of the general body condition of the horse (right).

Biography

Jessica P Johnson after completing an undergraduate degree in agricultural science in 2006, she graduated with an MVB in veterinary medicine from University College Dublin in 2011. She then completed three equine internships: in Dubai Equine Hospital, Troy town Equine Hospital and finally in the University College Dublin Veterinary Hospital. Following nine months in equine practice in Northern Ireland, she returned again to the UCD VH in 2014 where she completed a 3-year residency to become a European specialist in large animal surgery. Alongside this she also completed a doctorate of veterinary medical specialization (DVMS) with a thesis entitled "ultrasound-guided injection techniques of the axial skeleton in the horse". In addition to small intestinal anastomosis and ultrasound-guided injection techniques in horses is her other special area of research.

Publications

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Abstract citation: Jessica P Johnson, More than just the feet: an approach to the laminitic horse, Veterinary Medicine 2021, 2nd World Congress on Veterinary Medicine, May 26-27, 2021. Conference Link: http://veterinarymedicine.pulsusconference.com/

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