#SPILLERSScience: New research presented at prestigious global endocrine conference
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SPILLERS™ was the only UK feed brand to be represented at the prestigious Global Equine Endocrine Symposium(open in new tab) last month, where ground-breaking work on endocrine disease was revealed.

We, together with international collaborators, were involved with 10 of the 37 research papers presented, advancing our quest to understand more about the diagnosis and management of Pars Pituitary Intermedia Dysfunction (PPID) or 'Cushing's syndrome' and equine metabolic syndrome (EMS) – two conditions which can be associated with laminitis.

What was covered?

Our very own Director of Science, Dr Pat Harris, and colleagues from around the world presented research on

- Muscle atrophy (wastage) scores in horses with and without PPID.

-The possible association between insulin dysregulation and high ACTH concentrations (in the blood) in senior horses and ponies with no clinical signs of PPID. *A blood test to measure ACTH concentration is commonly used to diagnose* ***PPID*****.**

-Whether concentrations of immunoreactive β-endorphin (*a hormone produced in the pituitary gland*) in the blood may be useful in helping to identify animals with PPID .

-The possible use of spontaneous blink rate as a non-invasive indicator of stress, in a group of senior horses and ponies with and without PPID.

-The effect of dopamine depletion – *which is associated with PPID* - on insulin sensitivity and insulin response to a glycaemic meal in Standardbred horses.

-Factors associated with the insulin response to an oral sugar challenge in a group of ponies. *The oral sugar test (OST) is one practical method of diagnosing insulin dysregulation*.

-The effect short-term transportation stress on insulin response in horses.

-The insulin response to small meals of forage pellets in insulin dysregulated vs non-insulin dysregulated horses.

-The concentration of adiponectin in the blood in a population of aged horses and ponies with and without PPID. *Adiponectin is a hormone produced by fat cells and low adiponectin is a risk factor for laminitis*.

-The evaluation of adiponectin and serum amyloid A concentrations in diet-induced insulin dysregulation. *Serum amyloid A is a marker of inflammatio*n.

-The effects of experimentally induced insulin dysregulation on adiponectin concentrations in metabolically healthy ponies.



What's next?

We are currently involved in a number of studies looking at how best to feed and manage

the senior horse as well as the horse with insulin dysregulation. This includes being part of a major international project to improve the early diagnosis, healthcare, husbandry and nutritional management of PPID. We promise to keep you updated on our findings so watch this space!

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