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## Case of the Quarter

Louisa is a beautiful 9yo gray Pasofino mare. While active and lively (sometimes too lively) she carries too much condition – she is fat. Body condition scoring in the horse is done on a scale of 1-9, and Louisa is a 7+. Louisa's people know this and have been actively trying to help her lose weight. Louisa is on a calorie and carbohydrate restricted diet, as well as thyroid supplementation. Progress has been slow, but is being made. More turn-out, in a dry lot, has helped immensely.

Louisa has Equine Metabolic Syndrome (EMS) – insulin dysregulation. Obesity may be the result of the insulin dysregulation, but it may also contribute to the insulin problems. Adipose tissue, fat, is more metabolically active than we used to recognize. The fat cells likely contribute to the poor carbohydrate metabolism and insulin issues. The late summer has brought new challenges to Louisa and her condition. Seasonal changes in the horse's metabolism (think about hair coats and cycling in mares) make this a riskier time for both Cushing's disease and EMS horses. Grasses that have been growing hard through all the early summer rains start to dry out and concentrate sugars as they are stressed. Remembering that adipose, or fat cells, are metabolically active – many horses have shrugged of their winter thinning in favor of Spring and Summer pasture plumpness – insulin dysregulation and especially insensitivity are worse now. All these factors combine to pose a very serious threat of laminitis in effected horses.

Mona is Louisa's mother. She has Cushing's disease, also known as pituitary pars intermedia dysfunction (PPID). Many PPID horses also deal with insulin dysregulation. Mona suffered from severe chronic laminitis issues that eventually resulted in tendon surgery and ongoing corrective shoeing. Her difficult lessons were invaluable in helping Louisa's owners to recognize the signs of laminitis early on – before more serious damage was done.

When Louisa started standing more than walking her owners wondered if trouble was mounting. Louisa's people recognized her poor attitude and ill temper as signs of the pain she was experiencing. Dietary restrictions were stepped up – no more reaching under the fence for grass. Protective shoes were applied - mechanical aides from Nanric, Ultimates. Her exercise was restricted to a very small paddock.

Exercise is important to any horse, especially to the EMS horse as it becomes essential in managing weight and metabolism. In Louisa's case however, the laminitis has to take precedence. We have to heal her feet and prevent further damage so that she can return to more exercise and continue her efforts at weight loss for healthier living.

Louisa's mother is a good example of how laminitis can spiral downward in its effects and lasting complications. Thanks to her owners' astute observations and quick action, Louisa is doing well and may not suffer any permanent damage to her feet.