

EPM AND THE LESSONS LEARNED

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I heard it, and I am sure many of you have heard it too: EPM is a potentially deadly disease with only a rare hope of permanent recovery after aggressive treatment.

EPM, or Equine Protozoal Myoencephalitis, is caused by a protozoan parasite called *sarcocystis neurona* which is harbored by opossums and transmitted via certain species of birds.

When opossums urinate and defecate on hay or grain, the parasite is ingested by the horse. Interestingly, the equine Herpes virus (Rhino Pneumonitis Neurotrophic Herpes Syndrome) and EPM are frequently found to coexist resulting in many EPM horses being misdiagnosed solely with the Herpes.

Initially, horses may act depressed and unwilling to work or become hyper-excitable with behavioral problems such as bucking, head tossing and emotional symptoms. The ataxia, both front and hind-end weakness, will appear along with a sore back and muscle atrophy (wasting). Clinical symptoms are almost always asymmetrical. The only definitive test for EPM is a cerebrospinal fluid tap, but by the time that is positive, the blood/brain barrier has long been breached by the protozoa with resultant major neurological damage.

Let me tell you my experience with EPM...

Shortly after purchasing Lieutenant, my Missouri Fox Trotter (who was originally from Missouri where there is a high opossum population), his behavior became unpredictable and dangerous. He started spooking at the slightest stimuli, acting lethargic and depressed and his overall digestion was poor. Both the physical and behavioral symptoms were sporadic: worse in the morning and by the time the vet arrived in the late afternoon, he'd be perky and present like a normal horse. In fact, during his second relapse, I took him to the most reputable equine neurologist in the entire state; he passed as being in no way neurologically impaired.

Because EPM is so difficult to diagnose, Lieutenant kept suffering. In the interim, I had numerous trainers suggest that I put him down. Fortunately, I listened to my intuition and continued to look for a physiological cause to his erratic behavior. Finally after months of frustration, Lieutenant's physical symptoms were so severe that a neurological test was performed "at the right time" and Lieutenant failed it! It sounds ridiculous but this was truly a blessing. At last I had something to work with.

After many hours researching, I was able to "diagnose" Lieutenant on his symptoms alone:

- They were more severe on the right side of the body
- He had paralysis of his facial nerves, indicating the parasite had already passed the blood/brain barrier and was present in the brain stem.
- His breathing was extremely labored, both from poor digestion and also paralysis to the laryngeal nerve, the longest nerve in the horse's body (a clinical study on EPM horses showed a high number of horses were suffering from "roaring" because of this)
- While most ataxia is hind-end, he was more uncoordinated and weak on the front end, giving out completely on a couple of occasions

A common misunderstanding with EPM is that the disease attacks rapidly and leaves the horse debilitated in a very short period of time. Although, this may be true in some instances it is not always the case; the level and intensity of symptoms is contingent on the overall health of the affected animal and their ability to fight off the parasite. I have little doubt that Lieutenant came in contact with this parasite while living in Missouri that it lay dormant in his body for several years.

When I purchased him, the stress of relocating to a new environment weakened his immune system leaving him vulnerable to attack. Prior to my buying him, his symptoms were so slight and sporadic, (i.e. tripping and depression) that he passed a pre-purchase Vet exam with no problems.

I opted against the spinal tap because the samples pulled are often contaminated and inaccurate. Plus, the stress of this procedure alone is enough to kill an EPM horse. Instead, I treated Lieutenant with a medication from Bayer called Marquis. It is the only medication on the market that kills the protozoan parasite, *Sarcocystis Neurona*. Within three weeks Lieutenant's symptoms all but disappeared, but his digestion was worse due to the medication.

He had a full recovery with no permanent neurological damage. He no longer had a nasty parasite attacking his brain stem and so he reverted back to the gentle, willing horse I had purchased six months prior. It is important to note that if he had not had this full recovery after being treated with Marquis, an official EPM diagnosis would be all but impossible. It was a miracle—or so I thought.

Finally, I wised up and addressed the real issue. Killing the parasite was a mere band-aid approach. After all, roughly fifty percent of all horses in the Eastern United States have been exposed to this parasite yet do not exhibit and are perfectly healthy animals. Therefore, I could only conclude that my horse had a compromised immune symptom. As a “whole,” Lieutenant was not healthy enough to fight off this parasite. I figured that the poor quality of hay being thrown at the boarding facility, in addition to the horrible sweet feed I was giving him, was contributing to his “leaky gut” and that this digestive tract imbalance acted as a gateway for the parasite.

Unfortunately, my ride on the “EPM rollercoaster” was just beginning. I did find several clinical studies performed at a major University that indicated a high number of EPM horses had ulcers and/or “leaky gut syndrome.” The traditional treatment with Marquis Paste was a double edged sword. On the one hand it kills the parasite, but it also eliminates a good Ph balance in the stomach. With each relapse, I responded with Marquis Paste. The last relapse left Lou with a severe muscle injury to the lower back, slight neurological damage on the hind end and his digestion was worse than ever.

It was at my most desperate time that a friend recommended the DYNAMITE® Specialty products and DYNAMITE® itself suggested a basic forage of top quality grass hay. This was a dilemma because the ranch he was boarded on at the time had very poor quality hay. I opted to purchase my own grass and put Lieutenant on a DYNAMITE® Program of Pelleted Grain Ration, DYNAMITE®, DynaPro™ and IZmine.

Within 7 days, I saw my horse transform! I'd never actually seen him in full health and it was astonishing! After a couple of weeks, I threw in some Free & Easy™ to help heal up his injured back; again, the results were amazing. Because of my experience with EPM, it is my firm belief that Leaky Gut Syndrome is definitely the underlying cause allowing the protozoa to enter the body through compromised intestinal walls due either to heavy grain feeding, poor nutrition, ulcerations, toxic chemicals, etc. After all, opossums and horses have coexisted for just how long?

And when did we start having an ‘epidemic’ of EPM? It is also my firm belief that it was the DynaPro™ (and just plain feeding him better!) that really healed Lieutenant’s intestines by providing the critical alkaline pH balance that was needed. Granted, the Marquis paste did kill the existing protozoa that had invaded his system, but it was not until I put him on the natural diet and DYNAMITE®, that his health permanently improved.

Why did it improve? I believe it was because his immune system was finally being nourished instead of being overwhelmed. As Dr. Marvin Cain, co-founder of the International Veterinary acupuncture Society states, “Definitive control is dependent upon the immune system. Compromising the immune system with stress, whether environmental, nutritional, emotional, pharmacological in the form of repeated vaccination or corticosteroids given in suf-



ficient quantities to cause white cell suppression, can with all or any cause exacerbation of the immune system. What does all this mean? Simply that our focus must shift from treating symptoms which is becoming outrageously costly, to say nothing about the extreme problems that the animals must endure, to maintaining the integrity of the immune system. We can coexist with them [the Herpes or EPM organisms] as long as the immune system is healthy.”

It’s been two years now and Lieutenant is completely sound and healthy. He has not relapsed and I don’t believe he ever will. I have since switched him from regular DYNAMITE® to TNT™ for simplicity and have added in DynaSpark™ For Horses; he receives these supplements six days a week.

I have learned, however, that some horses may need more immune system support such as daily DYNAMITE® Ester C®* or Hiscorbadyne®, or the addition of S.O.D either daily in maintenance doses or “power rounds,” or even temporary use of MSM for symptom relief.

I was lucky with Lieutenant and I feel blessed to have found this line of miracle products.

Thank you DYNAMITE®!

*Ester-C is a registered trademark of Zila Nutraceuticals

A Much Happier, Healthier Lieutenant!

