



# The Lead Line

*"Leading your horse to a healthy future."*

Elkhorn Veterinary Clinic

April, 2023

## Pituitary Pars Intermedia Dysfunction vs Equine Metabolic Syndrome

*Early, correct identification of these diseases can add years of quality to your horse's life.*



Although the outward signs of both PPID (pituitary pars intermedia dysfunction) and EMS (Equine Metabolic Syndrome) appear similar, they are different diseases. The most concerning consequence of both diseases is the occurrence of laminitis, which, if severe enough, can cause the loss of use of the horse and even lead to their demise. Correct diagnosis allows for proper treatment which can add quality years to the horse's life. Fortunately, we have very good diagnostic testing for both PPID and EMS.

PPID is a chronic, degenerative disease occurring in approximately 1 in 5 horses over the age of 15. It is characterized by abnormal fat deposits, loss of muscle (especially over the top-line), delayed or no shedding, abnormal sweating, lethargy, infertility, decreased performance, depressed immune function (seen with a higher incidence of skin and dental disease) and laminitis. PPID is caused by a degeneration of neurons in the brain that affect the production of hormones such as ACTH (adrenocorticotrophic hormone). Treatment for PPID is with pergolide mesylate, diet and exercise.

Equine Metabolic Syndrome generally occurs in horses under 15 years of age and is characterized by general or regional obesity with an increased risk of laminitis. Unlike PPID, there is a

strong genetic predisposition for EMS. Contributing factors to horses developing this disease are diets of high glycemic index, such as grain and lush pasture, and limited exercise. When tested, horses with EMS will have high circulating insulin, but be normal for pituitary-adrenocortical function. Treatment for EMS is through dietary management and exercise.

As stated earlier, testing for either disease is very important to developing a treatment plan. PPID tests determine the level of plasma adrenocorticotrophic hormone (ACTH). This can be done with a simple baseline ACTH test which is a blood draw performed any time of day but at least 4 hours after a grain meal. A more sensitive test is the TRH (thyrotropin-releasing hormone) stimulation test which measures the ACTH response to TRH. With the TRH Stim Test, two blood draws are performed at least 12 hours after a grain meal. The first blood draw measures the baseline ACTH. The hormone TRH is administered IV and after a 10 minute wait, the second sample is collected. This more sensitive testing may allow us to diagnose and start treatment sooner, offering the horse relief from the disease and possibly extending their life.

If you believe your horse is "too easy of a keeper" or seems always struggling with front hoof tenderness, now is a good time to call for an appointment and have them evaluated.

Horses enrolled in the Elkhorn Veterinary Clinic Equine Wellness Program are at a distinct advantage for being evaluated for PPID, EMS, and a host of other conditions.

Having a veterinarian evaluate the horse medically twice a year allows for an independent, trained eye to look objectively at your horse. In addition, clients with horses enrolled in the wellness program receive discounts on all diagnostics, including blood work and x-rays.

# A Multi-Faceted Approach to Reducing Parasite Resistance

*Fecal egg counts along with herd and pasture management can help minimize the affect of parasite resistance to dewormers.*



By now, most of our clients have heard of the resistance by internal parasites to the current horse dewormers and the subsequent problems that causes. This resistance is the culmination of horse owners following guidelines encouraging indiscriminate, every-other-month deworming principally designed to eliminate large strongyles. Presently, large strongyles are no longer the major concern and parasite resistance to dewormers is highly prevalent in small strongyles and ascarids. Additionally, it's understood that adult horses vary greatly in their innate susceptibility to parasites infestation which necessitates individualized care and deworming.

Individualized care begins with the fecal egg count. Fecal egg counts help identify which horses need to be dewormed and at what frequency. If we deworm horses shedding over 200 eggs/gram approximately 50% of the horse population will be dewormed, but it will provide a 95% reduction of overall egg shedding. Subsequent fecal egg count reduction testing, done 10 – 14 days after deworming will help determine the level of parasite resistance on the property and give valuable insight into future deworming plans.

Other than deworming, what can the horse owner do to aid in keeping their horse's parasite load to a minimum? Parasite infection occurs when eggs passed in the horse's manure hatch into larvae that crawl up the grass and are then eaten. This larval development and survival are temperature dependent, occurring between 42°F and 100°F and optimally when temperatures average 77°F. Horses in our area are at greatest risk of

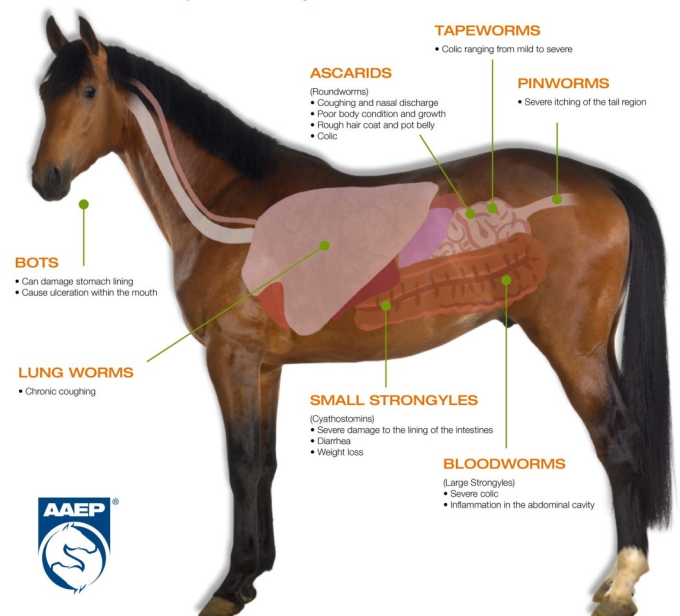
infection from spring through autumn.

Keeping stalls, lots, and pastures clean of manure will significantly reduce the number of eggs and larvae in the environment, subsequently decreasing the rate of parasite transmission from horse to horse. Pick manure from pastures daily or as frequently as possible. If unable to remove manure from pastures, refrain from harrowing fields and keep manure piles intact. Harrowing pastures not only breaks up the manure piles but also spreads the eggs throughout the pasture, forcing horses to graze contaminated areas. Horses will naturally avoid eating near manure piles, so avoid overstocking and overgrazing pastures. Manure disposal can be challenging for farms. If manure must be spread on fields, make certain that it is fully composted as the heat produced by composting destroys the parasite eggs and larvae. Isolate new horses from the herd until their parasite load is determined and they have been dewormed.

Pasture horses of similar categories together, such as low shedders with low shedders, and young horses with other young stock. Keep horses off a pasture for a year to reduce parasite numbers. If that is not possible, rotate horses among your pastures. For instance, avoid pasturing young stock in the same pasture in consecutive years. Since parasites are host specific, consider rotating pastures with other livestock species to disrupt their life cycle.

## COMMON EQUINE PARASITES

and the problems they can cause



To learn more about internal parasite resistance, visit the website: <https://aaep.org/sites/default/files/2021-03/>

**Leading your horse to a healthy future.**

# Keeping Hooves Healthy in Wet Weather

*Hoof health can be a challenge during “mud” season.*



April showers bring May flowers, and mud. Lots of mud sometimes, which can lead to hoof disease such as thrush, hoof cracks, white line disease, and hoof abscesses. Here are a few tips to help keep your horse's hooves healthy during mud season:

1. Be proactive! Reduce mud by increasing drainage around shelters, waterers, feeders, gates, and anywhere horses gather.
2. Practice good pasture management by avoiding turn-out on soaked ground and instead turning horses out in a dry lot or covered arena.
3. Provide a clean, dry environment for at least part of the day to give your horse respite from the wet ground.
4. Avoid turn-out in deep mud.
5. Keep the mud sponged off your horse's legs and feet.
6. Pick feet out regularly, checking for odor, pain, swelling, discharge, and loose shoes.
7. Be consistent with farrier work as shoes may loosen faster and hooves may grow unevenly.
8. Call your veterinarian if you suspect your horse has developed any hoof problems to avoid these problems progressing into something more serious.

## The Scoop on Poop

Your veterinarian may feel a fecal sample is necessary if your horse has unexplained weight loss, is unthrifty, or suffering with diarrhea. Otherwise, **it's best to perform fecals when the most internal parasite eggs are being shed. In the upper Midwest, this would be late spring, summer and early fall.** Following these recommendations will help ensure valid testing results:

1. Store 2 or 3 fecal balls in airtight and leak-proof containers.
2. Refrigerate samples immediately after collection to keep eggs from hatching.
3. Frozen samples will not provide accurate results as eggs will be damaged with freezing.
4. Testing should be done within 7 days of collection.
5. Initial fecal egg counts should be performed 12 or more weeks AFTER ivermectin deworming.

## Don't Forget!

- Established clients who have used the Elkhorn Veterinary Clinic for routine or scheduled work in the past 18 months will be given priority for emergency calls and receive a loyalty discount on their emergency call fee.
- Enroll your horses in the wellness program as early in the year as possible to begin collecting additional discounts and garner the highest return on your enrollment fee.
- Call now to schedule your spring work. Our client service representatives are here to help and can answer your vaccination and other health questions.

Every horse deserves great preventive care.

**Especially yours!**

Enroll today to lock in your horse's annual preventive care costs and take advantage of our wide range of additional savings!

**2023 Wellness Program Fee:  
\$550.00**

(Multiple horse discounts available)



**Hold the reins on inflation!  
Save 25% on the following:**

- Annual Coggins test
- One dental exam
- One dental float (level 1 or 2) with sedation\*
- One fecal egg count
- Annual Vaccinations:
  - Tetanus Toxoid
  - Eastern & Western Encephalomyelitis
  - West Nile Virus
  - Rabies
  - Potomac Horse Fever
  - Influenza (Spring & Fall)
  - Rhinopneumonitis (Spring & Fall)
- Two general health exams (Spring & Fall)
- Nutrition & weight consult (Spring & Fall)
- Digital medical record sheet

**Your savings continue with 10% off on all of the following services:**

- Imaging (x-ray, ultrasound, endoscopy)
- Laboratory tests
- Veterinary exams
- Additional fecal egg counts
- Microchipping

**Our Wellness Program takes your personal preferences and financial needs into consideration:**

- Choose your veterinarian & the appointment time that best fits your schedule.
- Save even more when you share farm calls among multiple owners at the same location.
- Take 5% off the price of the program when enrolling 3 or more horses.
- Take advantage of our payment plan - pay half down now and the remainder over five months.
- Receive a prorated refund on any unused services.

**Use the QR code to easily enroll your horse today!**

Contact us for assistance or more details.



[https://form.jotform.com/Elkhorn\\_Vet/2023-Wellness-Program](https://form.jotform.com/Elkhorn_Vet/2023-Wellness-Program)

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