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Early Signs of Lameness

Horse owners associate the word “lameness” with feelings of dread, expecting that it may mean an end to a horse’s riding career. When they think of lameness, many people picture an obvious head-bobbing lameness at the trot or a retired horse with arthritis turned out to pasture. However, there are many early signs of lameness that can help us to identify, diagnose, and intervene earlier in a lameness process, which gives us a better chance for successful healing of an injury, or to implement treatments that may slow the progression of musculoskeletal disease and give a horse a longer riding career. This article will describe some of the more subtle signs of lameness and help you identify them sooner.

A lameness grading system has been developed by the American Association of Equine Practitioners (AAEP) to aid both communication and record-keeping. The scale ranges from zero to five, with zero being no perceptible lameness, and five being most extreme. The AAEP guidelines explain the grading system this way:

- 0:** Lameness not perceptible under any circumstances.
- 1:** Lameness is difficult to observe and is not consistently apparent, regardless of circumstances (e.g. under saddle, circling, inclines, hard surface, etc.).
- 2:** Lameness is difficult to observe at a walk or when trotting in a straight line but consistently apparent under certain circumstances (e.g. weight-carrying, circling, inclines, hard surface, etc.).
- 3:** Lameness is consistently observable at a trot under all circumstances.
- 4:** Lameness is obvious at a walk.
- 5:** Lameness produces minimal weight bearing in motion and/or at rest or a complete inability to move.

Veterinarians often first see a horse when its lameness grade is a 3 or higher, because that is when the lameness becomes severe enough to be consistently obvious to many owners. If we were to diagnose lameness at a grade 1 or 2, we

would have much better chances of intervening and implementing treatments to achieve soundness or slow the progression of lameness. Some early signs of lameness are as follows:

- Acting stiff
- Shortening of stride
- Reluctance or difficulty picking up or holding a certain lead
- Cross cantering
- Change in behavior, attitude, or performance
- Toe dragging
- Stumbling
- Back soreness
- Change in gait when changing between hard and soft footing
- Short choppy strides in frontlimbs
- Asymmetrical hip or shoulder movement at the trot

A lameness evaluation performed by a veterinarian would begin with a thorough exam of the feet, limbs, neck, and back, checking the feet for pain with hoof testers and palpating the limbs and muscles for soreness, heat, or swelling. The next step would be to watch the horse's movement and perform flexion tests, which can place stress on different areas of a limb to exacerbate lameness when they trot off immediately after the flexion is performed. A veterinarian may want to see the horse move at a variety of different gaits, on both a hard and soft surface, and sometimes under saddle. The next step is to perform a series of nerve or joint blocks, where local anesthetic solution is placed over the nerves supplying a specific area of the limb. If the horse goes sound after a block is performed, then the area of soreness has been identified. The next step is using imaging, such as xrays and ultrasound to evaluate the bone and soft tissue on the sore area. Other advanced imaging such as MRI or a bone scan may also be beneficial. From these findings, a treatment plan would be initiated that best suits the diagnosis and the horse's intended use.

Successful treatment of lameness depends on many factors including the severity of the problem, the length of time it has been going on, and the type of work the horse is being asked to do. In many cases, the earlier the problem is identified and treatment is initiated, the greater chance the horse has of returning to soundness.