



Ballybrown Equine Clinic



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LAMENESS EXAMS

Stress, strain or injury can take a toll on any horse, even with no conformation defects. When lameness occurs, you should contact your vet immediately. A prompt examination can save you time, money and frustration by diagnosing and treating the problem immediately, possibly preventing further damage. The goal of such early examinations is to keep small problems from becoming big ones.

Lameness evaluations are also routine in most pre purchase examinations. When your vet evaluates an animal you are considering buying, you may be forewarned at potential problems and should be able to make an informed decision.

LAMENESS DEFINED

Lameness has been defined as any alteration of the horse's gait and can be manifest in such ways as to affect performance. It can be caused by pain in the neck, withers, shoulders, back, hips, legs or feet. Identifying the source of the problem is essential to proper treatment.

EXAMINATION PROCEDURES

Vets have specific systems for performing examinations, depending on the reasons for the evaluation. Essential features of a thorough examination include the following.

The medical history of the horse: The vet asks the owner questions relating to the past and present difficulties of the horse. He/She also inquires about exercise or work requirements and any other pertinent information.

A visual appraisal of the horse at rest: The vet will study confirmation, balance and weight bearing, and look for any evidence of injury or stress.

A thorough, hand on examination: The vet palpates the horse checking muscles, joints, bones and tendons for evidence of pain, heat swelling or any other physical abnormalities.

Application of hoof testers to the feet: This instrument allows the vet to apply pressure to the soles of the feet to check for undue sensitivity or pain.

Evaluation of the horse in motion: The vet watches the horse walking and trotting. Observing the horse from the front and from behind and both side views, the vet notes any deviations in gait, failure to land squarely on all four feet or an unnatural shifting of weight from one limb to the other. The horse will also be observed walking and trotting in circles, on the lunge line. The vet will observe for any signs such as shortening of the stride, irregular foot placement, head bobbing, stiffness, weight shifting.

Joint flexion tests: The vet holds the horse's limbs in a flexed position and then releases the leg. As the horse trots away, the vet watches for signs of pain, weight shifting or irregular movement. Flexing the joints in this manner may reveal problems that are not otherwise readily apparent.

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DIAGNOSTIC TESTS

Diagnostic procedures are often necessary to isolate the specific location and cause of lameness. Lameness is best treated with the specific diagnosis. If your vet has cause for concern based on initial examination, he/she may recommend further tests, including diagnostic nerve and joint blocks, radiographs, scintigraphy, ultrasound, arthroscopy and examination of blood, synovial fluid and tissue samples.

Diagnostic nerve and joint blocks: These analgesic techniques are perhaps the most important tools to identify the location of the lameness. Working systematically, the vet temporarily deadens sensation to specific segments of the limb, one joint at a time, until the lameness disappears. This procedure isolates the area of pain causing the lameness. Blocks can also help determine whether the condition is treatable.

Radiographs: These are useful in identifying damage or changes to bony tissues. They should be interpreted only by an experienced and knowledgeable vet, since not all changes are cause for concern. Radiographs provide limited information about soft tissue, such as tendons, ligaments or structures inside the joints, which are often a source of lameness.

Scintigraphy (nuclear scanning): Radio-isotopes injected intravenously into the horse are concentrated in areas of injury. These areas are scanned with a gamma camera, providing an image of a troubled site.

Ultrasound: This procedure uses ultrasonic waves to image a troubled site.

Arthroscopy: This surgical procedure allows visual examination of the inside of a joint or tendon sheath. It requires general anesthesia, but may be the only way to define the damage. Some diagnoses can only be made with arthroscopy. If deemed necessary, surgical treatment is often preformed at this time.

Blood, synovial fluid and tissue samples: These samples can be examined for infection or inflammation. Such examinations usually require laboratory testing.

LAMENESS SCALE

Because each horse has unique performance characteristics, evaluating lameness can be challenging. Experienced riders may detect minor alterations in gait before they are apparent to an observer. Lameness may appear as a subtle shortening of stride, or the condition may be so severe that the horse will not bear weight on its affected limb.

With such extremes of lameness possible, a lameness grading system has been developed 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.

0: Lameness not perceptible under any circumstances.

1: Lameness is difficult to observe and not constantly apparent, regardless of circumstances (i.e. under saddle, circling, inclines, hard surfaces.)

2: Lameness is difficult to observe at the walk or when trotting in a straight line, but constantly apparent under certain circumstances (i.e. weight bearing, Circling, inclines, hard surfaces)

3: Lameness is consistently seen at a trot under all circumstances.

4: Lameness is obvious at a walk.

5: Minimal weight bearing in motion and/or at rest or a complete inability to move.

MORE ABOUT OBSERVING THE HORSE IN MOTION

The vet should observe the horse on both soft and hard surfaces, since different types of lameness may become apparent with different footing. Lameness may only be apparent when a horse is under a saddle or it may be manifest only at liberty or on a lunge line, when the horse can be evaluated without the influence of the rider.

A thorough examination of the horse at different gaits is important so that problems do not go unnoticed. A horse's walk and trot may be especially revealing. The slower gait of the walk makes slight deviations more easily apparent than are not obvious at a faster pace. The trot however is perhaps most useful for evaluating lameness because it's the simplest gait, consisting of the two beat stride pattern, where the horse's weight is distributed evenly between diagonal pair of legs. In some cases, the speed and concussion of the faster pace (i.e. canter gallop) is needed to help demonstrate the lameness.

LAMENESS EVALUATIONS IN RELATION TO PREPURCHASE EXAM

Evaluation for the presence of lameness should be part of every pre purchase evaluation. While it is impossible to predict a horse's actual performance, the vet can provide information regarding lameness or potential lameness by evaluating conformation, movement, medical history and past performance. The extent of the exam will be determined by the buyer and vet. Value, intended use and long term goals may be factors in selecting certain exam procedures. For example, radiographs and other diagnostic tests provide comprehensive images of the horse's condition, but they also add to the exams cost.

LAMENESS EVALUATION

In the pre purchase, the vet will try to determine two things:

1. Is the horse lame at the present time or are there existing conditions that deserve a closer look?
2. What is the likelihood that the horse will remain serviceable for its intended use? Age health, level of activity, conformation. The vet will inform the buyer of the relevant facts and risks, and the buyer can decide whether or not to purchase the horse.

FACTORS IN THE LAMENESS EQUATION INCLUDE MANY VARIABLES

- Conformation
- Hoof care
- Use of protective leg boots
- Fitting and condition of the horse
- Degree and manner of training
- Type and level of performance
- Age
- Skill, balance and experience of the rider
- Type of condition of the ground on which the horse performs
- Disease or injury
- Genetic predisposition
- Others.

In order for the vet to evaluate a horse fairly, the animal should be fit, shod, conditioned and in training for its intended use.

By identifying even minor lamenesses and acting swiftly to correct it, you will minimize the risk of injury to the horse and you will be rewarded by better performance and a longer useful life from your horse.