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A lame horse is defined as having an abnormal gait or an incapability of normal locomotion. The commonest causes of lameness in horses include infection (e.g., subsolar abscess), trauma, congenital conditions (e.g., contracted tendons), and acquired abnormalities (e.g., osteochondritis dissecans). Factors unrelated to the musculoskeletal system such as metabolic, circulatory, and nervous system abnormalities (e.g., wobbler syndrome) can also cause a horse to become lame. Lameness resulting from musculoskeletal abnormalities is the leading cause of poor performance in athletic horses and thus the ability to diagnose and treat lameness is an important technique in veterinary medicine. The timely and accurate evaluation of lameness requires a detailed knowledge of the horse's anatomy, biomechanics, conformation, breed characteristics and an ability to assess a variety of gaits – ie walk, trot, canter..

More lameness is seen in the forelimbs than the hindlimbs and almost 95% of forelimb lameness occurs from the knee down. When the hind limb is involved, however, many more problems are seen in the upper part of the limb, especially in the hock or stifle.. However accurate lameness diagnosis may not always be as straightforward as it seems so a methodical approach must be employed. It is always important to start a lameness examination with a complete history of the lameness, a general physical examination of the horse to rule out other, potentially more serious diseases, and a thorough conformation assessment. The horse's gait or movement must then be evaluated initially while walking but then trotting both in a straight line and in a circle. Usually this is done by a handler leading the horse but occasionally will be done under the saddle. A variety of surfaces may be used depending on the horse and the suspected lameness. Hard level surfaces are most often used to evaluate lameness however in some cases the use of a sand or grass surface may be warranted. Through gait analysis, the veterinarian can then establish which limb or limbs are involved by observing the horse in motion. Once the limb (or limbs) involved in the lameness is identified, the veterinarian will palpate each lame limb to better determine which particular region is affected. Hoof testers (Fig.1) are frequently used at this point to assess the presence of pain in the foot. The goal of this phase of the examination is to find evidence of heat, pain, and swelling to better pinpoint the exact cause of the lameness.

Manipulating the joints by flexing and extending the limbs and assessing which joints or structures are painful, and/or if a decrease in the range of motion exists is an important part of localising the lameness. Flexion tests (Fig.2) are often used to see if lameness increases afterwards which can help isolate the lameness to that area of the leg. Lameness in the horse is often quantified by veterinarians using a lameness grading system. This subjective grading system is based on a five-point scale ranging from 0 to 5. Using this standardized grading system allows consistent description of lamenesses and allows progressive tracking of a lameness in the same horse over time.

The five grades are as follows:

- *Grade 0* is defined as no detectable lameness under any circumstances.
- *Grade 1* is defined as lameness that is difficult to observe and is inconsistently apparent regardless of the circumstances (e.g., in hand or under saddle, hard surface, incline, circling).
- *Grade 2* lameness is difficult to detect at a walk or trot in a straight line, but is consistently apparent under particular circumstances (e.g., under saddle, hard surface, incline).
- *Grade 3* lameness is consistently observed at a trot in all circumstances.
- *Grade 4* lameness is obvious with a marked head nod, hip hike, and/or shortened stride.
- *Grade 5* lameness is obvious with minimal weight bearing either during motion or at rest. The horse might be unable to move.

Regional anaesthesia is a valuable tool in lameness diagnosis. Both joints and nerves can be temporarily blocked from sensing pain with local anaesthetics such as lignocaine. For example, blocking the palmar digital nerves that supply the foot can desensitize the heel and sole region to help diagnose pain in the back half of the hoof caused by conditions such as navicular disease. Once a nerve block has been performed, the horse is re-evaluated to determine if the lameness has lessened or diminished and, if so, to what extent. Athletic horses are often lame in more than one limb, so blocking out one lameness can potentially reveal another. Alternatively, if no improvement in lameness grade is noted, then the source of pain likely resides in another anatomic location. Sequential blocks can then be performed until the source of the lameness is located.

Once the source of the lameness is identified, radiographic assessment is often the next step in finding a diagnosis. Ultrasonography is also often utilised especially where tendons and ligaments are thought to be involved. . In subtle lameness cases, the use of advanced imaging techniques such as a bone scan (nuclear scintigraphy), magnetic resonance imaging (MRI), and computed tomography (CT) may be required. The treatment and prognosis for any lameness will vary dramatically depending on the use of the horse and the exact nature of the lameness. Treatment plans may vary widely depending on these factors. Conservative therapies such as box rest, hand walking and paddock rest may suffice for minor lamenesses, while other more significant injuries may require surgical correction to ameliorate the lameness (e.g., fracture repair).

Other treatment options, depending on the cause of the lameness, could include non-steroidal anti-inflammatory drugs (NSAIDs), joint injection with various anti-arthritis compounds, physical therapy, extracorporeal shock wave therapy (ESWT), IRAP (interleukin-1 receptor antagonist protein), platelet-rich plasma (PRP), and/or stem cell therapy.