Routine Trimming and Therapeutic Farriery in Foals

Stephen E. O'Grady, DVM, MRCVS

KEYWORDS

• Foals • Farriery • Hoof trimming • Tendon laxity • Flexural deformity
• Angular limb deformity

KEY POINTS

- Hoof care in the first few months of the foal's life is serious business and should never be taken lightly.
- Overall hoof care is a joint venture between the veterinarian and the farrier.
- Farriery plays a vital role in both the development of the hoof and the conformation of the limb.
- Management of the feet and limbs during this period will often dictate future hoof and limb conformation, which in turn will play a role in the success of the foal as a sales yearling or mature sound athlete.
- A sound foot care program is time-consuming, whereas assembly-line trimming is quick and easy, but the former is much more beneficial.

INTRODUCTION

Among the many factors that dictate the success of the foal as a sales yearling or a mature sound athlete are decisions and management concerning feet and limbs during the first few months of life. This is the period when hoof care helps to produce a strong foundation (hoof) for the animal's future athletic career while influencing the growth and angulation of the limb above the hoof to some degree. Realizing that there are potential complications associated with interventional measures, it is important to understand their principles, as well as the indications, contraindications, and appropriate treatment measures. It is important to remember to avoid causing damage to the foot or other skeletal structures with the various farriery methods used and not allow the foot to become a "victim" of treatment.

Many breeding farms have developed foot care programs that use the skills of a veterinarian with an interest in podiatry and a farrier working together as a team.

Virginia Therapeutic Farriery, 833 Zion Hill Road, Keswick, VA 22947, USA
E-mail address: sograd y@look.net

Vet Clin Equine ■ (2017) ■–■
http://dx.doi.org/10.1016/j.cveq.2017.03.012 **vetequine.theclinics.com**

The veterinarian uses medical and anatomic knowledge, whereas the farrier uses technical and mechanical skills. This joint venture allows a faster and more accurate diagnosis, treatment, possible resolution, and prognosis for foot problems. Unless an orthopedic problem is noted at birth or shortly thereafter, all foals are examined by the veterinarian, farrier, and the manager/owner at the time of the first trim, which is generally performed at a month of age. Problem or suspect foals are identified and are then examined on a monthly or bimonthly basis and followed through weaning. Many subtle problems or indications of potential problems can be detected early, leading to immediate treatment. If this program corrects the limb alignment or increases the athletic potential of one animal on the farm, then the program becomes cost-effective. This article focuses on routine farriery in young horses and those limb deformities that can be addressed through therapeutic farriery or farriery combined with surgery. Surgery associated with limb deformities in the young horse is discussed elsewhere in this issue.

EVALUATING THE FOAL

Good record keeping is vitally important. Records are designed for the individual needs of a given farm/owner and should reflect the physical appearance of a foal's feet and limbs at birth and any subtle changes that occur during development on at least a monthly basis. Digital images (pictures and radiographs) can be taken and added to the foal's record.

Digital pictures are very helpful in determining progress or regression in the foal's feet/limbs. Foals should always be observed walking each time they are evaluated and trimmed. The author prefers to observe the foal walking before the feet and limbs are examined. Watching the young foal walk can be challenging, as they seldom walk in a straight line. This can be remedied by walking the mare along a fence or wall and letting the foal walk on the opposite side of the mare or follow the mare. The foal is observed as it walks toward and away from the examiner. Here the foal is evaluated for any lameness that may be present, the pattern of the foot flight, how the foot breaks over at the toe, and how the foot contacts the ground. When examining the feet and limbs from the front, using an imaginary dot system may be helpful. Starting at the ground surface of the foot, an imaginary dot is placed at the middle of the toe of the foot, the coronary band, the fetlock, proximal third metacarpal bone (MC3), carpus, and distal radius. When these dots are connected with an imaginary line, it is easy to see if and/or where an angular limb deformity exists. In the ideal situation, when viewed from the front, the dots should form a straight line. However, one must be careful to rule out the presence of a rotational deformity. In this case, both carpi are rotated outward (laterally) leading to a toe-out or splay-footed conformation, yet when the dots are connected, the axial alignment of the limb forms a straight line. When viewed from the side, the dots should again form a straight line from the distal radius to the fetlock and from the fetlock through the digit to the ground. The coronary band is observed from the front to see if it is level or parallel with the ground. Examining the feet and limbs from the side should note whether the carpus is flexed or hyperextended. The hoof-pastern axis is evaluated to determine if the bones of the digit are aligned and not broken forward (flexure deformity) or broken backward (flexor flaccidity). Any swellings along the limb or involving the physis are noted and recorded. Each deformity is noted and scored on a scale of 1 to 5; grade 1 being mild whereas grade 5 is severe. Finally, the foot is evaluated off the ground, observing the position of the hoof relative to the bones of the digit (offset foot), symmetry of the foot, and the integrity of the horny structures of the hoof capsule. When viewing the solar surface