

Shoeing the foal

By Steve Stanley

Foals begin hitting the ground in January and usually end sometime in June. Foaling season is a critical time to evaluate an individual's conformation, particularly the lower leg.

Generally, the higher up the leg you look, the longer you've got to correct a flaw. For example, the growth plates at the fetlock joint close in just 90 days. If you have noticed a problem with the angle of a fetlock joint after 90 days, you've already lost the opportunity to correct it before the growth plate matures.



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According to farrier Steve Stanley, the higher up the leg you look, the longer you've got to correct a flaw in a foal's conformation.

They can angulate either too far inside (varus) or outside (valgus). If there is a problem in the fetlock it will almost always be angulated in (varus). This can also happen at the knee joint (carpus), but isn't as urgent, because knee joints mature in 24 months. If you did surgery on a knee early, it would be for extreme circumstances.

Dr. Paul Thorpe, a surgeon who has been prominent in central Kentucky for 25 years, says the earlier you intervene on angular deformities in fetlock joints, the greater your chance of success. An angular deformity is one where the cannon bone (above the ankle), and the pastern bones (below the ankle) are not in a plumb line of weight bearing.

A rotational problem in foals exists when the bones are in a plumb orientation, but the hoof is turning inward or outward. Again, inward is the main concern in the early stages. If a foal is toeing out in its early stages that is not a big concern to me unless the hoof is actually bearing weight outside the bony column of the leg. As foals mature they tend to rotate in because the chest widens and muscles develop.

Another way to distinguish between angular or rotational is if the foal begins toeing in or out after 90 days. In this case, it is definitely rotational and a farrier concern, not a surgical one.

Now, what can we do to correct an early foal? If your foal's lower limb is canted (angular) inward more than 5 degrees from the center axis of the cannon bone, surgery is a viable option. Depending on the severity a surgeon can either do a periosteal elevation (PE) to stimulate the growth plate on one side only, or in more urgent conditions, they can put a single screw in to lock one side of the growth plate. This will allow for growth in only one direction.

A PE is a relatively simple procedure and the least invasive, while the screw requires a second surgery to remove it later on. From the farrier's side, we can put lateral (outside)

or medial (inside) extensions on the foal's hoof. These extensions are to help the hoof bear more weight on a given side of its hoof by increasing the ground surface of that hoof.

If the foal is toeing in, then a lateral (outside) extension is applied, if toeing out, a medial (inside) extension is used.

I try to be very careful about using medial extensions because of a very real risk of over-correcting when that foal matures. As said before only when the foal's hoof is bearing weight outside of the bony column will I use a medial extension.

For extensions I use an acrylic base product (Equilox) and add approximately 25 percent of the overall width of that hoof to one side, thereby increasing the ground reaction force to that side of the hoof. One can also use a glue-on shoe that is wider on one side. Extensions without a shoe will distort the hoof over time.

Glue-on shoes don't allow the hoof to grow with the foal, so neither application should be left on longer than eight weeks at a time--often six is better. When saying early intervention is key, I would note that I have put lateral extensions on foals as early as 10 days old.

Another type of deformity in young foals is flexural. One such type is a case where the foal is very upright in stance and, sometimes, unable to get the heel to touch the ground. If noticed early (no improvement three days after foaling) they can be treated by giving oxytetracycline, 3-5 grams IV (by a vet) and can be repeated in 48 hours bandaging the affected legs and limiting exercise.

In severe cases a surgeon can cut the check ligaments allowing the feet to load normally. This is an immediate result and, where foals are six months old or less, that ligament returns to full strength in about six weeks. This is nearly always a bilateral (both feet) condition.

Another flexural deformity is hyperextension of the fetlock joint. This is when the ankle is dropping too far while the leg is loading. It usually happens in hind legs right after birth. These can result in the back of the ankle touching the ground and the toe of the hoof not touching the ground. It can also happen in front legs, but is rarer.

Many of these types of foals improve on their own in a few days, sometimes remarkably so. But in cases when you are worried about the foal harming its leg, before it strengthens enough to keep the ankle off of the ground, a farrier can apply a heel extension shoe to those feet and lend the needed support until the foal matures enough on its own to prevent injury.

When trimming foals, I find it best to start early--30 days old for a normal foal, earlier if a problem is seen. At several breeding

farms that I work, we trim foals every 14 days until they reach 90 days old, then we decide whether to keep going every 14 days or switch to 30 days.

A 14-day interval has two advantages. First it allows the foal to be seen more often. Sometimes the importance isn't a need to be trimmed, but the need to be seen and evaluated. Second, in cases where your farrier is trimming the hoof in an uneven manner for the purpose of correction, a farrier can maintain that correction and do a better job of minimizing hoof distortion.

Working with these foals before the farrier comes is critical for the safety of everyone involved. It doesn't take long for those foals to weigh 350 pounds and up--that is 350 pounds of bone, skin and muscle. They can whip three good men pretty fast if they haven't been worked with. Not only are the people at risk of being hurt, but also your foal, your product if you breed to sell, or your hopes for glory and money if you breed to race.

Just a little work every day goes a very long way.

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Stanley said that shoeing foals early and often helps farriers find and correct problems more effectively.