



All forms of contraction have one thing in common: The hoof capsule becomes more narrow upon weight bearing, instead of expanding on weight bearing. Even so every hoof is different, we still can give some general advice on trimming contracted hooves.

Hooves are relatively small, but they do have to deal with rather large forces. Problems occur when the correct conditions (ground, performance etc.) are not given. The necessary basic form must be recognized, the unhealthy form must be stated and addressed. Even if every hoof is slightly deviating from the ideal, the basic function has to be observed.

Before you attempt to treat a contracted hoof, you must first assure that the horse will have the correct living conditions.

The hooves must be trimmed at frequent intervals (sometimes every two to four days), in such a way that the hoof capsule can broaden.

You also must know how to trim in such a way as to not keep the horse overly inflamed for too long a period of time. The existing inflammation should go down before you trim again. By not raising the inflammation level even further with every new trim the recovery of the horse can be much faster and less painful.

Inflamed hooves especially must pump regularly, i.e. they have an absolute need for constant, but quiet movement, day and night. Running around is not conducive to healing.

Until the inflammation has subsided, the horse should be kept on smooth, firm, non-concussive ground or on flat pasture, not on rocks or concrete. Vibrations are additionally painful and slow down healing.

The horse owner must show consideration for the horse at this time and refrain from riding or driving for a while.

Contracted hooves are a serious and complex problem. Reshaping contracted hooves into healthy, natural hooves can take weeks, months or years. The timeframe depends on the individual circumstances, the amount of bone remodeling present, and the damage already in existence.

When we look at the re-shaping (trimming) possibilities of contracted hooves, we have to consider several points:

1.) Original shape of a perfectly functioning hoof

Always remember the perfect shape you are aiming for. It is important to have a perfect picture of the perfect hoof capsule in your mind at all times.

2.) Impact forces on the existing hoof capsule

Visualize the impact of the hoof when it becomes weight bearing. Visualize where and how the hoof capsule deforms upon weight bearing. In a perfect hoof the horse lands on the heel/bulb area first, then weighs the full hoof before impacting the toe and becoming non-weight bearing.

Imagine the ground being one of two pressure plates.

The other pressure plate being the weight coming down on the coronet band. Your trim will be shaping the hoof between these two pressure plates.

Wherever you are lacking impact, the horn will grow faster.

Wherever you have a lot of weight coming down on the hoof capsule, it will grow slower.

Where the horn is thicker, it will wear slower and therefore seemingly grow faster.

Where the horn is thinner it will wear faster or seemingly grow slower

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3.) Anatomical boundaries

You can only trim within the anatomical properties. Study the anatomy of the hoof in every detail and recognize what is possible and what cannot be done from an anatomy aspect. You can make a horse more comfortable by removing horn where it causes pressure points and inflammation. But you can only balance within the given anatomical reality. That means if a hoof is already too short on one side, you cannot shorten it more to achieve balance.

4.) Metabolic problems

A horse who is already highly compromised on metabolic issues may not be able to deal easily with your changing the form of the hoof capsule.

Inflaming the tissues by aggressive trimming is never advised. To know how much to trim, where and at what time takes not only a lot of knowledge, but experience as well.

Over-inflaming the hoof by asking for more expansion and maximizing corrections can slow the horses progress greatly, even reverse the same. The horse will have to pay for this with pain. Careful evaluation of every foot is important in order to succeed.

5.) Quality of life for horse

As we have examined earlier, movement is imperative to the horse. The quality of his very being depends on the ability to move. While you may want to trim the hoof capsule as much to specifications as possible, that same tactic may make the horse very uncomfortable, thereby reducing the movement you would like him to get. Evaluate carefully how much to trim in order to keep the horse as sound as possible. The more he moves, the more circulation he generates. Circulation is important to generate healing.

6.) Quality of performance requirements

Anatomy again. What makes a hoof truly sound? The absence of all pathologies is # 1, but the suspension of the coffin bone within the hoof capsule is really the crux of the matter. The tighter the laminar connection is, the sounder the horse will be. There is a lot of discussion on the Internet about the importance of not touching the sole. While this seems to be correct to the amateur consumer, you have learned about hoof mechanism, contractions and how sole contraction is most prevalent with all contractions. What you get when you don't keep the sole flexible to some degree is inflammation and bruising of the sole corium. As a result, the horse will not use the same hoof at full expansion anymore and hoof mechanism will be less. Less hoof mechanism will result in less circulation. With reduced circulation healing can not take place. Neither can the laminar connection tighten up to a point where the horse will be sound on any terrain. More about terrain later. Again there will be a fine line between too much and too little. We will explore this in the next chapter.

It is of vital importance that you observe all of the above points to allow the horse to heal and regain his full potential at the shortest possible timeframe.



When trimming for contraction you have to remember a few significant points:

- 1.) No matter how well you trim, without movement nothing will change
- 2.) No matter how well you trim, without moisture nothing will change
- 3.) No matter how well you trim this one time, without frequent repetition (Twice a week, once a week, bi-weekly) nothing will change
- 4.) No matter how well you trim, without proper terrain you will not get correct results

There are many things to consider when trimming for contraction. Often contractions are combined and you have to prioritize at times. What do you need to do first, what is most important? At all times you want to leave the horse as sound as possible and it is important not to compromise the integrity of the hoof.

Here is just a brief review about trimming and function:

The concavity should be in a healthy hoof about 1 cm to the weight bearing wall in the front hoof and 2 cm to the weight bearing wall in the hind hoof.

The more the hoof is contracted, the more concavity there will be.

Go back to about half the length of the frog. This is where the bar should start. Do not trim in the crevice between the bar and the frog. This would weaken the bar.

Determine how high you want your heel to be (3.5 cm from where the edge of the lateral cartilage dips into the hoof capsule). Shorten the heel to that mark. Be sure not to over-shorten the heel.

Insert a scoop at the same time.

The goal is to achieve a 30° hairline. A 30° hairline will assure (in most cases) a ground parallel coffin bone. This in return assures a even distribution of the weight bearing forces onto the coronet band.

Now that you have determined the depth of the concavity and the height of the heel, you can start to trim the bar so that it is straight and the top of the bar will be ground parallel when weight bearing.

Sometimes the bar has been pressed onto the sole horn for such a long time that it is difficult to see the difference between sole and bar horn. But it is important to peel the bar carefully off the sole. Bar horn is much harder than sole horn and will alter the flexibility of the sole when pressing against it. The bar can only be completely functional when it is straight. A curved bar does not have the resistance to prevent the heel from collapsing upon weight bearing.

As the sole is vaulted higher in a contracted hoof than in a healthy hoof, the sole has to be able to flex in order to facilitate healing. The scoop is only pulled as far forward as the hoof needs shortening. That means if the hoof is in it's frontal part already too short, the scoop has to be shorter than usual. The sole will be trimmed in a straight plane between white line of the wall

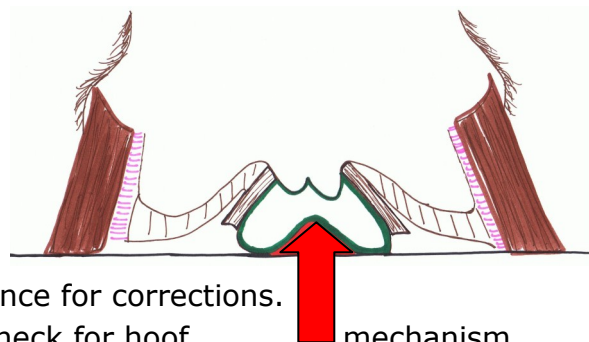


and the tip of the frog. In general one would only trim the sole as far as it is trimming off easily (exfoliating). Try to avoid trimming the hard sole. In contracted hooves one has to be careful, as sometimes the sole corium is so pressed together that it bulges. That way you can easily end up cutting into the sensitive part of the hoof. Be very careful here. Because of the strong pressure of the bar onto the sole it may have been not possible to grow strong sole horn under the bar and you may run into corium when you try to peel the bar off the sole.

It is not enough to change the hoof capsule so that the horse's weight bears onto the coronet band correctly, but you also have to make sure that there are no other lever forces that will contract the hoof further.

When the contraction has been present for many years, it may help to cut a flat triangle into the frog to give the ground more opportunity to widen the hoof.

Often the hoof may be too short overall and you may not be able to get a 30° hairline. The only help for that is to trim the hoof as close to ideal as possible and then move the horse as much as possible on very elastic terrain. That way you will stimulate hoof growth, which will give you the substance for corrections.



After you have made all corrections, check for hoof mechanism. Without the same you will not facilitate any change. Hoof mechanism has to be present on the ground the horse lives on. After all 4 hooves are corrected, check again. Experience showed us that the solar vault and the bars change often so fast, that they can already be corrected again before you leave the horse. For the same reason you have to control the situation after 2 - 3 days again.

Contractions need to be identified correctly in order to prioritize trimming actions, relieving the horse over time from the pressures exerted by various contractions.

Summary

- Ensure optimal living conditions
- Create optimal hoof form and correct often
- Leave the sole relatively thin so that it can draw flat during weight bearing
- Daily hydration
- Expect abscessing
- The more movement, the better

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