

The Consequences of Hoof Overgrowth

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Hoof overgrowth is one of the most common hoof pathologies I deal with, and yes, I consider it a pathology because like thrush, wall cracks and a stretched white line, it compromises the health of the hoof, contributes to all these things, and also effects your horse far more than you know and in ways you would not suspect. I say this because, I am still asked by clients about stretching out the trim cycle to save a few dollars from time to time. Or someone had to cancel an appointment, and I could not get back to them for 3-4 weeks because my schedule did not facilitate the option. So what happens when the hoof wall overgrows? How does it affect my horse?



The pictures above are extreme cases that fortunately I don't have to see too often. This does not happen overnight. The donkey on the left was under irregular, uneducated, farrier care, and the horse on the right (I was told) had not been trimmed in over a year. Both of these animals had metabolic problems the owners were unaware of causing the hoof / bone attachment to fail over and over and over again, also known as laminitis and founder. You can see the coronary bands on the donkey (left) under great stress as her weight pushed those disconnected coffin bones into the distorted hoof capsule. Walking was painful at best. The horse on the right could barely walk to the area where I trimmed her. She had lived with feet in this condition for many years with the owner calling someone to do something when it just got too bad. I could feel the arthritic changes to her painful joints as I tried to find a position for her so she could lift up a foot. Holding any one hoof up to trim was difficult. Her frogs were a dark, black tarry goo with maggots. The worst I have ever seen. The stench took my breath away.

Let's think about the changes that take place in their bodies when they cannot walk as they were designed. Joints become inflamed when they do not operate properly. And in this situation they cannot. Inflammation leads to arthritis in the joints and bone remodeling when they don't move in balance. Tendons and ligaments atrophy from standing still for long periods of time or laying down; the coffin bone demineralizes, the unnatural position of the extensor process of the coffin bone

within the hoof capsule can pinch off the blood supply to the coronary corium where the hoof horn is produced or the circumflex artery at the bottom of the coffin bone which supplies blood to the sole can be damaged. Muscle spasms in the shoulders, hips and back result from trying to find a way to move each leg for every step. The entire body is affected with pain. For these horses, rehabilitation takes a long time of dedicated care beyond just trimming. The horse's body needs to be re-educated on how to move normal again with chiropractic, acupuncture, body work, massage and rehabilitative exercise. If the damage is too severe to the internal structures of the hoof, or bone remodeling is too advanced, recovery may be marginal at best or not possible at all.

So, you say my horse doesn't look like that, and I would never let a thing like that happen. Let's look at some more pictures. One's that I see a little more often.



Every one of these horses (4 different horses) was sore- not immediately following the trim, but 2-3 days afterward. If you had to wear big clown shoes or even shoes that were 3 sizes too big for a few days or weeks or try months, you would have to find a different way to walk around with those long toes. It would not be your normal way of walking. You would use your muscles differently and your back would spasm and become sore, possibly causing bone misalignment. Then you take those clown shoes off, and for the horse this means a trim back to, or close to, normal. The habit of moving a certain way doesn't go away, but the resistance from the long toes is not there and the body is forced suddenly into moving in a way it hasn't for a long time. What's it like to go for a hike in the spring when you didn't hike all winter? Or start riding again after you haven't for awhile? You're sore, those muscles are out of condition and you asked them to do something they weren't

prepared for, and so it is with our horses, and this is sometimes why a horse turns up sore 2-3 days following a trim like this, and not because the trimmer did something wrong.

The long hoof wall takes over as the weight bearing structure. The sole and frog fall out of function with reduced hoof mechanism (expansion and contraction as the horse walks). The long bars don't allow the hoof to flatten and expand on weight bearing. The frogs on all these horses were thrushy, weak, overgrown and the soles were chalky, black, and unable to exfoliate. The horse on the top right (previous page) had a good enough wall attachment to his coffin bone so that he was trying to trim himself. The quarters thin and break away in an attempt to put the shock absorbing frog back on the ground, and given enough time through movement, the toe would eventually chip, crack and break away.

The poor pony on the bottom left (previous page) was trimmed by a farrier every 12 weeks. His bars grew right over his soles. Imagine walking around with what might feel like 2 pencils in your shoes on the bottom of each foot!, and for 3 months. Those bars didn't get like that overnight or even in 1 trim cycle. Under those bars was soft, thrushy, chalky sole. The sole should be hard and calloused like rawhide to protect the hoof on rough terrain. It cannot do this if it is not part of daily, regular use of the horse on the ground he lives and moves on.

Another common problem with chronic overgrowth is underrun heels.



The heels fold under. See the distorted hairline in the top left photo. This is not normal, and this horse walked in a compromised fashion for years. This was man made. This horse needed very regular 4 week trims, a diet change, Acupuncture, Chiropractic, Massage and re-educating exercises to be ride-able again. The after

photos are after many months, though better, we still have a way to go. (both fronts were the same.)

Here's another scenario that I see too. A horse throws a shoe on one front foot, but the other hangs on for weeks—months. This Polo Pony came to a rescue from the kill pens. One front foot short and worn down, the other extremely long. Here is the long foot before and after trim.



One stride was longer than the other. Breakover was different for each foot. He was so sore in his thoracic spine and shoulders that he put his ears back and looked at me to tell me how much it hurt, when I palpated his back. He was not a mean horse—he was very well behaved while I worked on all 4 feet. Look at how much I removed from the overgrown foot. Imagine living and walking constantly, day and night for 2 months with one leg higher than the other, and not able to do a darn thing about it except cope!

Here's another situation that presents itself in many ways. An emergency comes up and you have to cancel a trim appointment, you are short on funds and decide to cancel or you forget, and we have to reschedule. Either way, it means your horse has to wait until there is an opening in somebody's schedule to accommodate the humans.

Here is a horse where the postponement meant waiting just 2 more weeks.



The hoof wall has grown well beyond the sole. (previous page) The heels and bars are beginning to run under. The sole is getting soft and chalky at the junction of the hoof wall and bars. Unexfoliated sole is building up. I had been trimming this horse for some time, and now I am looking at a situation similar to what he had at his first set-up trim. We have just taken 2 steps backwards. If he was going out for a trail ride, he may have been a little tender because his sole callous is not what it was just 2 weeks ago before the hoof wall took over.

So...what should a hoof look like before a trim?



Before and after. This is a 4 week trim interval in late winter/early spring. The only things done were touching up the mustang roll, reducing bar length slightly and removing a frog flap.



Before and after, another 4 week trim interval same time of year. The only work done to this foot was rasping the heels for balance and touching up the mustang roll. Notice in these photos that the soles are smooth, calloused not chalky or with black cracking, unexfoliated material. This is where we need to raise the standards in hoof care and setting trim intervals.

The change is minimal, almost unnoticeable. The closest thing to natural wear we can do with tools, unless you trim your own horse and have even better control over his care. The 4 week trim interval for most horses on a maintenance trim will always be just that, a maintenance trim. For some who live and are ridden on a varied

terrain, 5-6 weeks usually works fine. If I am taking out the nippers and repeatedly removing excess wall, there will be little if any progress in establishing a “gravel crunching” barefoot horse.

If your horse has been fitted with hoof boots for riding or rehab, they are fit following a fresh trim, so it is critical that you keep the trim interval recommended for your horse so the boots will fit the horse when they are needed.

If we are going to change the paradigm of horse and hoof care, we need to let go of the old standard practices of 6-10 week trimming intervals. If we are going to own and keep horses, we owe it to them to keep them regular and routine in the areas that in nature would be taken care of if they were not living in confined spaces. There are many things we can do with the horse's environment to encourage movement and natural wear. It is part of this paradigm shift to a more natural way of keeping. Next to their wild or feral cousins, our domestic horses are neither sound or healthy. It is we that stand in their way, imposing our human concepts and budgets on their way of life.

Hoof overgrowth weather from neglect, trying to save a few bucks or forced for showy looks has serious consequences to the life and soundness of your horse. The need and cost for hoof care must be as much of a priority as food. They are creatures of movement, a prey species, and just because we choose to confine them, it does not change their physiology. They have to live almost their entire lives standing, walking, and running on the 4 feet they were born with. Far too many horses are euthanized from lameness problems under our care. This has to change. Let's make sure our friends have feet of comfort, not pain, feet of health, not sickness, feet that are capable of going a lifetime in soundness.

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