



# Hoof Injuries...What to do??

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**Accidents happen.** Despite our best efforts to protect our horses from harm, we can't always prevent them from getting hurt. Foot injuries excite our deepest fears, perhaps because of the old adage "no hoof, no horse". The most common acute injuries are cuts or abrasions, puncture wounds, and sudden blows.



## My horse is bleeding!

Cuts to the coronet band or heel bulb can produce a lot of blood. It can be visually quite alarming, but it only illustrates that the equine foot is a highly vascular structure.

Bleeding cleanses on a cellular level, so take a deep breath and get out the cold hose. Cold hosing is beneficial in many ways. It cleans without abrading healthy skin, slows the blood flow, helps ward off swelling, and lessens sensation and pain, all within ten minutes.

I keep on hand a small spray bottle containing three to five drops of tea tree oil (TTO) in two-thirds water and one-third witch hazel (the concentration doesn't have to be exact). If the wound is fresh, it is beneficial to use TTO straight from the bottle for initial application after cold hosing.

TTO is a natural antibiotic, antifungal and anti-inflammatory -- it also wards off flies. Witch hazel is a great astringent and helps stop the bleeding.

Thoroughly cleanse the wound twice daily by using a sponge in a scrubbing motion to remove any dead or loose tissues. This encourages healing from the inside out. A wound open to the air heals much quicker than one that is covered. Wrapping is an invitation to infection – it creates a dark, moist, anerobic environment in which anaerobic bacteria (bacteria that grow without air) can thrive. Remember to keep your horse's tetanus vaccinations up to date, as tetanus is an anaerobic bacterium.

Try to keep the horse moving in a free choice environment. Spread hay around the pasture to encourage walking. Make sure the footing is not deep or manure-filled muck but a relatively dry field or grass lot. A little dirt (or even flies) in the wound between cleanings is not harmful, but standing in manure and urine-laden paddocks or stalls is counterproductive to natural healing.

**NOTE:** Winter presents ice. A solid crust of ice on the snow can cause some not yet fully transitioned horses to peel or cut the coronet band. The periople can peel up and there can be blood. It can be alarming but generally presents as only a blemish and will quickly heal over with no intervention required.

It should take no more than three weeks to thoroughly heal a deep wound. Nature is really that fast!

## **What about older cuts?**

Older cuts present a different scenario. If the cut is more than 12 hours old, there is a good chance a scab has formed to stop the bleeding, and there may be proud flesh building around or under the scab. This is nature's way of rapid healing and stopping blood loss. But scarring and infection can also arise under the scab.

Shallow wounds can be allowed to scab over with no ill effects, but large scabs on deep wounds act like a wrap under which bacteria can grow. Cold hosing is still needed but you also need to scrub the wound. Apply ten to 15 minutes of cold water to soften the scab and decrease sensation enough for you to use a simple kitchen pot scrubber sponge to abrade the wound. It may bleed lightly again, but this is okay – it means you have a clean wound. Keep using cold water alternately with the scrubber sponge until all scabs and proud flesh are eliminated.

Stitches are rarely if ever applied to the mobile foot; healing will still take place by keeping the horse moving and the wound thoroughly cleansed.

Internal antibiotics are most often unnecessary if you follow a strict cleaning regime and use TTO and witch hazel topically. Infections can occur if there is a foreign object still trapped inside the wound, or if cleansing rituals are skipped or not done thoroughly enough. An infection can cause an increase in body core temperature, so be sure to check your horse's vital signs. The normal will be between 36.5° to 38.5° C (99° to 101° F).

## **How to deal with puncture wounds**

Puncture wounds are something you want to try and avoid. Look around your horse's living space and remove any potential for injury. Keeping pastures clear and fencing in good repair is a must.

What if you are out riding and pick up a nail or foreign object from the trail? Again, be sure to have your horse's tetanus shots up to date. Depending on the nature and placement of the object invading the foot, you may need to call a vet for x-rays to see if there is any damage to the hoof bones.

The treatment for minor puncture wounds includes soaking the foot in warm water and a solution of TTO (five to seven drops per gallon) or apple cider vinegar (one cup per gallon). You may also put TTO straight into the puncture to deeply cleanse the site.

Depending on the wound, you may elect to call the vet, who might administer antibiotics and advise wrapping. In my experience, however, long term wrapping and confinement and internal antibiotics are not necessary, while cleansing and movement hasten and assure recovery.

This is where nursing experience can help. It is not always easy to ask a sore horse (or person) to move, stretch, breath and relax. Reducing stress aids in healing...and increased stress (like locking up a horse used to being in a herd, antibiotics, pain meds etc...can draw out the healing period.

## Blows to the hoof

Horses can kick...hard!! When there is a wall, fence or tree in the way, the resulting blow can produce internal bruising, broken hoof walls, bars or bones. Moderate bruises may be reabsorbed by the body, but deep bruising and broken bars often produce enough damaged tissue that it has to be walled off and expelled through an abscess. This happens within a few weeks of the initial blow.

Broken walls can tear some laminae and be initially painful, but in a relatively short time the injury stabilizes, grows down the hoof and is replaced by healthy tissues. Broken bones in the foot can be only seen by x-rays, and usually heal within six to eight weeks. No confinement is necessary, but a smaller pasture to encourage walking rather than running could be beneficial. Shoeing is unnecessary, but a proper, balanced, barefoot trim by a qualified barefoot practitioner is required, as is freedom to move and a staple diet of hay.

Painkilling drugs are not advised because the horse can re-injure himself when feeling NO pain. Pain is the body's way of protecting from further injury. Try more natural pain relief approaches, such as MSM, Buteless or devil's claw.

## Common chronic injuries

Most abscesses and bruises and almost all splits and cracks do not result from sudden injury, but rather from internal factors versus external forces. They are symptoms rather than injuries.

Overgrown or unnaturally trimmed feet create abnormal pressures and strains that in turn initiate a myriad of problems inside the foot, ranging from chronic bruising to damaged nerves.

A diet that strays from the hay staple and into the land of sugars and starches will damage developing laminae and set sensitive horses up for chronic bruising and/or abscessing.

Abscessing can occur when bacteria enters the foot through a deep puncture wound....BUT...a greater number of abscesses start from the inside – not the outside -- and are preventable. Abscesses can present themselves in a few different ways. A suddenly three-legged lame horse may lead you to believe there has been a recent injury, but it could be that an abscess is just coming to a head and will soon exit. Some abscesses exit without your even knowing there was anything wrong. The exit hole can show up on the sole of the foot or the coronet band; abscesses that exit from the coronet band are often confused with cuts because that's what they look like.

Splits and cracks can result from poor hoof form. For example, a crack dead center on the toe is simply a result of abnormal physical stresses on the wall due to tall or collapsed heels and/or an over-long toe wall.



3 months of eq changes can produce 'miracles'



6 weeks between photos....the amazing shape shifting capabilities

Splits, cracks, bruises and abscesses can be repaired and made a thing of the past by looking more closely at diet, trim and turnout. Even making small changes towards a more natural lifestyle can reap great rewards.

### **A final note on injuries**

A horse can have a previous injury to the foot and coronet band that will continue to produce a scar running down the wall of the foot. This may be considered a blemish but most likely harbors no further insult. Heel bulbs that are almost sliced off can grow back and regenerate to full function using the above recommendations. The resulting scar is just that -- a scar.



Pics above show how the offending scar will grow down the hoof wall and be gone soon

Accidents do happen, but healthy, functioning feet, a hay staple diet and an enhanced natural lifestyle not only speed recovery and healing but also help reduce the risk of injury and virtually eliminate many problems commonly thought of as injuries. **Prevention is the key!**