

# Equine Foot Abscesses

by Dr. Michelle Pinney, DVM

My horse is lame! How could this be, he was fine yesterday and today he can barely walk! Unfortunately, this is a call that I receive frequently. How could he be that lame that fast? How did this happen? How does a foot abscess work exactly? These are all questions that I'm sure you have all wondered about when the topic of foot abscesses has come up. Hopefully, any questions that you had about foot abscesses will be covered here!

## Let's start with, "What is a foot abscess?"

A foot abscess is a bacterial infection of the subsolar foot. A sole bruise, cracked hoof, or puncture wound can all be great places for bacteria to gain access to the underlying tissues of the hoof. A horse can get a sole bruise from numerous surfaces, the most common being rocks or hard chunks of dirt. Typically, abscesses form between the keratinized and germinal layers of the hoof wall.

The abscess will take the path of least resistance, which means that it will eventually create a place of drainage along the coronet band or on the sole of the foot. If this area is not kept clean, it can pack with dirt and the abscess can build again. This is why your horse can be very lame, then much less lame, and then very lame once again. While abscesses normally are subsolar and carry an excellent prognosis, it is possible for other structures in the foot to become affected. This is more commonly seen with punctures and untreated abscesses, than with routine abscesses.

## But why is my horse so lame?

It is actually pretty easy to see why they are so lame when we look at what exactly is going on in the foot. When the abscess is forming there is a substantial (for the foot) amount of pus associated with the abscess. There is a limited amount of space in the foot and a very minimal amount of area for expansion; therefore, this pus creates pressure on the other structures in the foot, and in-turn causes pain for the horse. This is also why most horses feel and act much better not long after paring the abscess out.

## How do we fix this problem?

Identifying where in the hoof the abscess is located is the first step. Typically, this is done by using a hoof tester. Once the abscess has been isolated, a hoof knife or other specialty abscess knife is used to par out the area. It is important to know the structures of the foot and be able to "follow" the abscess, as uncontrolled paring of the foot is not desirable. It is highly recommended to have your veterinarian or farrier dig out abscesses.



Hoof testers are used to help locate the abscess

From here the treatment regimen is clinician preference. I typically soak the foot in Epson salts and water, apply a mixture of sugar and iodine to the area, and wrap the foot with a bandage. The salt and sugar act as "drawing agents." I also like to give phenylbutazone (bute) since these horses are painful and usually have some lower leg swelling. Tetanus toxoid vaccination/booster is highly recommended as well. I am not in favor of administering broad spectrum systemic antibiotics to treat foot abscesses.

The good news is that routine foot abscesses generally carry an excellent prognosis and can be easily maintained at home!



Duct tape makes a good moisture and bacteria barrier during treatment

Michelle Pinney, DVM -

"I grew up in Southeast Iowa and graduated from Winfield-Mt. Union High School in 2000. Growing up, I showed Quarter Horses in as many events as I could participate, but mainly in western performance events. My summers were also filled with numerous 4-H projects and activities, and FFA competitions.

I received my Bachelors of Science in Biology from Truman State University in Kirksville, Missouri, and then attended veterinary school at Iowa State University College of Veterinary Medicine in Ames, Iowa, where I graduated in May of 2008. While in veterinary school my main area of focus was equine medicine and surgery.

Since graduation, I have worked in a mixed animal practice in Fairfield, IA, and in an equine and small animal practice in north Texas. During the past summer of 2010, I received additional training in veterinary chiropractics from Parker College of Chiropractics, and did become certified in veterinary chiropractics.

Currently, I am a volunteer on the Birmingham Volunteer Fire Department and am going on 11 years as a 4-H leader. This summer I will be volunteering as a vet at the Wapello FFA rodeo and at local county fairs as a way to give back to programs that I greatly enjoyed in my childhood. I am currently doing relief veterinary work and mobile work in southeast Iowa.

My practice is composed of all species, but horses are my favorite patients! I am truly blessed to love what I do!"

