

## **Hoof Abscess Handout**

We are sorry your horse is experiencing a suspected or proven hoof abscess. These are sometimes a big surprise because they are usually sound one day, then the next they look like they have a broken leg they won't put any weight on the ground. Thankfully, most horses make a full recovery with a good treatment plan.

### **Hoof Abscesses Explained**

Hoof abscesses occur when bacteria get trapped between the sensitive laminae (the tissue layer that bonds the hoof capsule to the coffin bone) and the hoof wall or sole. The bacteria create exudate (pus), which builds up and creates pressure behind the hoof wall or sole. This pressure can become extremely painful.

Although most commonly seen during the wet winter and spring months, hoof abscesses can plague horses year-round. Moisture in the environment can soften regions of the foot and make it easier for bacteria to get trapped inside. Extremely dry conditions can cause brittle, cracked feet. The abscess-causing bacteria enter the foot through hoof cracks, by traveling up the white line, through penetrating wounds to the foot, and even by "close" horseshoeing nails. Deep bruising might also trigger abscesses.

### **Diagnosing a Hoof Abscess**

While a hoof abscess generally takes several days to develop, most horses don't show any clinical signs until the pressure becomes so great that severe lameness is evident. Often this lameness develops overnight. Changes in blood flow to the hoof cause it to throb, and this can be detected as a more evident pulse in the affected lower limb. Palpation of the coronary band (hairline) or heel bulbs often elicits pain. Some hoof abscesses can cause varying degrees of swelling in the lower limbs, but the majority will not.

Vets usually diagnose a hoof abscess based on history and a physical examination. Whenever possible your vet will use hoof testers to localize the abscess to a region of the foot. Sometimes they might use diagnostic nerve blocks or even radiographs to confirm the diagnosis or to pinpoint the exact location of the abscess.

### **Treatment**

The quickest way to relieve hoof abscess pain is to drain the exudates buildup, which is like popping a large pimple. The growing exudates and pressure of the abscess will try to take the path of least resistance. For some abscesses, this means they will rupture on their own and drain at the coronary band (commonly referred to as a "gravel") or heel bulbs. Other abscesses will need to be surgically drained by your veterinarian. For a small percentage of abscesses, they will spread deeper into surrounding structures, such as the coffin bone, the navicular bursae, or deep digital flexor tendon sheath. This is particularly true with chronic abscesses in which treatment is delayed. If any of these other structures become affected, the treatment can be prolonged, costly, and could result in unsoundness.

In most cases, the veterinarian will create a small hole through the white line, sole, or hoof wall in order to provide a pathway for the exudate to leave the foot. Once drainage is established, the veterinarian will probably apply some type of poultice or bandage to help pull the remaining exudates from the hoof. Depending on where the abscess drains, your vet might recommend keeping the drainage site clean until it has had a chance to dry and harden.

### **Prevention**

Regular hoof care and farriery is an important step in preventing hoof abscesses, but there is no guarantee that your horse will be immune to this problem. While difficult to control, avoiding extremely wet or dry conditions, as well as sudden changes in moisture, can help prevent formation of hoof abscesses. Routine mucking of stalls, pens, or other confined areas can also help prevent them.

*AAEP Forum article courtesy of [The Horse](#) magazine, an AAEP Media Partner.*

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