



No Hoof, No Horse

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The sentiment no hoof, no horse is never more obvious than when we see a horse with a hoof infection. Some infections within the hoof are so painful that owners often think their horse must have a broken bone. Thankfully that is rarely the case.

Hoof Abscesses

The most common hoof infection we see is an abscess. An abscess forms when bacteria from the environment gain access to the tissue underneath the hard outer layer of the hoof. Bacteria can be introduced through a small puncture wound or they can migrate up the white line eventually making their way into the deeper tissue. Horses tend to be more prone to abscesses when their footing is wet or muddy. The high moisture tends to soften the hoof and make damage more likely.

A sub-solar abscess is one that forms under the sole, or bottom of the foot. One that forms under the hoof wall is called a sub-mural abscess (sometimes referred to as a gravel). In either case, unlike other infections, antibiotics alone are not able to correct the problem. The diagnosis of a hoof abscess is made by carefully examining the foot with a hoof tester, an instrument that puts pressure on very precise areas within the hoof. An abscess will be identified by a focal area of pain. Once the problem has been located, the abscess is surgically drained.

Aftercare is very important, with drainage and cleanliness being vital. In some cases, your veterinarian may recommend soaking the foot in hot water and Epsom salt. Foot wraps are maintained to prevent re-infection until the surgical drainage site has healed. The normal course of treatment varies between 2-3 weeks.

White Line Disease

Another hoof infection that we diagnose is white line disease or WLD. This infection occurs in the non-sensitive layer of the outer hoof wall. Early in the course of the infection there is little or no pain associated with the condition. As the infection advances and more hoof wall becomes unstable, lameness develops.

WLD is currently thought to be caused by a fungus, although several different bacteria have been isolated from cases as well. The infection begins at a damaged area of the junction between the sole and the wall of the hoof. This small separation creates the perfect environment for the fungus, high moisture and no sunlight. If left untreated, the infection progresses up along the white line, detaching the outer layer of the hoof wall as it proceeds.

Many early cases of WLD are noticed at the time of shoeing and often can be corrected by simply trimming the foot. More advanced cases are found many times because a



portion of the affected hoof wall breaks off, exposing the underlying infection. Careful examination of the white line on the bottom of the foot is required to detect other cases.

A seemingly unending list of medications has been used for the treatment of WLD, many with little or no success. Most cases that cannot be corrected with trimming alone will require surgery to remove the affected layer of hoof wall, a procedure called resection. The amount of wall removed will be determined by the extent of the damage. All of the affected tissue is removed up to the level of normal healthy white line.

Following resection, the horse is shod with a bar shoe to help support the foot, medicine will be applied to the hoof daily as new healthy hoof grows out. Most horses with WLD make a full recovery, but may take many months for a new hoof to grow and fill in that which was removed.

