

## **Abscesses –the best possible action plan**

Foot abscesses are particularly common at this time of the year but how they are initially dealt with can significantly determine the prognosis. Never underestimate the damage that a foot abscess can do if it is left untreated, and sometimes can result in euthanasia.

Most foot abscesses are caused by bacteria entering interior hoof structures, usually via the white line, which is the sole-wall junction (just inside the hoof wall). Once the bacteria is in it thrives on the anerobic, slightly moist conditions and can very quickly result in an abscess.

The most common cause of abscesses at this time of year is environmental changes, as the ground becomes damp it softens the sole of the foot, making it easier for bacteria to penetrate. Other common causes involve trauma to the foot, such as standing on a nail or sharp stone or bruising of the hoof.

If your horse or pony has re-occurring foot abscesses it is worth discussing testing for Cushings Disease with your vet. Another less common cause of a re-occurring abscess is a keratoma – a benign growth inside the hoof wall that needs surgical removal.

The initial signs of an abscess forming might be an increased digital pulse to the foot. The hoof may feel warm to touch (although not always) and the final sign is a usually a sudden onset of severe lameness. It is not uncommon to turn your horse out in the morning looking sound and several hours later finding them not wanting to put any weight at all on the leg.

A vet will use hoof testers to determine the location of the abscess and will dig a hole to allow the abscess to drain. It is not uncommon for an abscess to have more than one tract so it is important they are allowed to drain fully. Once the abscess is open it is important to poultice the foot. This acts to draw the remaining pus, but also to prevent further bacteria going in.

We often have people ask if they can use a nappy to do this. We recommend using animalintex (or alternative) as it is designed to draw the pus out. Whilst a nappy will keep the area clean, it will not draw the remaining pus out of the foot. A softban under your vetwrap can help to prevent any rubbing. Grey tape will prevent the bandage getting wet from dirty bedding. After a couple of days of a wet poultice to drain the abscess, it is important to then harden up the foot again for a few days with a dry dressing and a foot spray (eg terramycin spray) before the shoe goes back on again.

If left untreated many abscesses will work their way out through either the sole or coronary band; however the horse is left in excruciating pain until the abscess is draining and the other real risk is that the tract works its way to the pedal bone which is serious and can result in an infected pedal bone. This at best will require surgery and mean a large vet's bill, or at worst euthanasia of the horse. Sadly this situation is more common than people may think.

Don't give the horse antibiotics because it slows down the process of resolution – but do make sure that the horse is up to date with tetanus. If the horse is not sound within a couple of days please call your vet.

## **Infected Pedal Bone – the facts**

Whilst horses with a foot abscess are very painful, an infected pedal bone tends to be even more uncomfortable. The infection can be as a result of a nail wound through the sole, a complication of laminitis, or a poorly drained foot abscess that normally affects the soft tissue inside the hoof wall. These abscesses normally track up the white line, or under the sole but if pressure builds up they can burst or penetrate through the living sensitive internal lamellae. When the bacteria then colonise the pedal bone, no amount of applying a poultice, hot tubbing or antibiotics will resolve the infection.

In most cases, the surgery to open up the hoof wall and scrape away the infected bone can be done under a standing sedation and local anaesthetic (either a nerve block or a pastern ring block). The exposed bone then has to be kept absolutely clean with sterile bandage changes whilst healing granulation tissue starts covering the bone, all the while preventing the infection from re-occurring. In addition to this, high levels of antibiotics are injected into the veins of the pastern area below a tourniquet. This is called an IVRP – and provides much higher levels of antibiotics in the tissue than normal injections or oral medication alone will.

The healing process is a long one. After the granulation tissue has covered the bone, a process called secondary keratinisation occurs, whereby the exposed soft granulation bed becomes firmer and harder, like the sole. The hoof wall then slowly continues growing down from the coronary band until hopefully a strong intact hoof structure remains. Occasionally a particularly virulent type of bacteria can prevent this from happening resulting in multiple unsuccessful surgeries, and a persistently infected bone and a lame horse – however in most cases the outlook is normally very good – providing the infection has been completely eradicated.

If you would like any additional information please call us on 01577 841010.

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