

## CORNS

### ***What are corns?***

Corns are specific types of bruises of the sole, specifically occurring at the angle of the sole between the hoof wall and the bars. They most commonly affect the medial (inside) aspect of the front feet. They are an important cause of lameness in shod horses.

Bruises are traumatic injuries which result in hemorrhage into the sensitive tissues of the sole. Hemorrhage increases pressure in the sensitive tissues, which results in pain. Hemorrhage causes discoloration in the typical manner of a bruise occurring anywhere else. Corns may develop suddenly or over time, the latter typically in horses with low heels where the walls collapse inwards persistently traumatizing the sole.

### **Corns may be classified as:**

**Dry corns** - hemorrhage between the sole and sensitive tissues causes thinning of the sole over the corn area. Paring with a hoof knife may reveal a red bruise, although this may be difficult to find until the affected horn grows down towards the ground level.

**Moist corns** - trauma causes inflammatory fluids to accumulate under the sole giving the impression that the horn of the sole is wet.

**Suppurating corns** - penetration has occurred and infection has developed underneath the sole at the seat of corn resulting in pus formation.

### ***What causes corns?***

Corns are almost invariably caused by shoes which fit improperly so that they are fitted short and tight at the heels, traumatizing this area. In some cases, shoes have been left on too long so that as the foot grows, the shoe is carried forward causing the heel branches to traumatize the corn area. In other cases, stones may become lodged between the shoe and the seat of the corn, resulting in injury and bruising. Excessive weight bearing at the heels, as in a horse with low heels or where heel calks or studs have been used, may traumatize the corn area.



Arrows show areas affected by

### ***How are corns diagnosed?***

Corns cause a horse to show signs of lameness, the severity of which depends upon the degree of bruising. The lameness is characterized by a shortened anterior stride phase with toes contacting the ground, saving the heels. The degree of lameness is increased on hard ground and when the horse is circling, and is decreased on soft ground. It is increased when shoes are removed. If corns affect both front feet, bilateral foreleg lameness may not be noticed until the horse is longed or ridden in small circles.

There is a pain response to hoof testers, specifically over the seat of the corn. The horse's digital pulse strength may be increased, and the feet may appear warm to the touch.

A dry, moist or suppurating bruise can be seen at the seat of corn when the overlying sole is pared away.

Radiographs may be used to rule out other causes of lameness in the heel area such as sidebones, navicular disease or pedal osteitis.

### ***How are corns treated?***

The horse's shoes should be removed as a first step. Dry and moist corns are pared with a hoof knife to relieve pressure. Suppurating corns are opened to drain and treated as for an abscess. A poultice, followed by dry protective bandaging, may help to speed recovery and the horse should be rested until recovered.

After rest and recuperation, the horse can be re-shod long and full at the heels. For chronic corns, the horse should be shod with wide-webbed egg-bar shoes to support the heels and encourage heel growth.

### ***How can corns be prevented?***

Regular hoof trimming and shoeing, with shoes that are fitted correctly to the horse's feet, especially that are not too short at the heels, is the best way of preventing corns in horses. It is wise to avoid excessive foot trauma on hard going.

Horses with thin soles often have poorly balanced feet, especially long toes and low heels (dorsopalmar imbalance) and this should be corrected, where possible, sometimes requiring egg-bar shoes to be fitted.

Foot pads are layers of rubber or leather that are fitted between the foot and the shoe so that the entire sole is covered in an attempt to prevent bruising of the sole. They may help in thin soled horses or in chronic corn cases. However, pads prevent the essential daily task of thoroughly inspecting the sole and foot and frog.

### **Caution**

Even with the best foot attention, some horses are prone to bruising of the sole. Prevention is always better than cure and the prognosis for chronic corns is guarded.



**Searching a foot for signs of abnormality**