



Introduction:

The hoof capsule is a semi-rigid structure that has to withstand the forces being placed upon it and still retain its flexibility to absorb the upper body loading during the weight bearing phase. The capsule has to encapsulate the pedal bone on the end of the limb for protection and support the sensitive internal structures. The outer capsule can be coloured or it can be white, the colour or pigmentation does not make a difference to the workings of the hoof.

Overview:

The thickness of the hoof capsule can change due to the weight or loading forces placed upon it, and if the foot becomes dysfunctional the shape and thickness of the wall could change. A healthy hoof capsule wall thickness only needs to be between 5- 8mm, with the wall thickness also being governed by the normal growth (reproduction) and toughening (keratinization) of the outer wall.

Hoof capsule flares are really distortions of the hoof capsule and they typically involve the quarters of the foot, they can involve the toe or front wall and then it is referred to as a dished wall. Flares can vary in their severity and if left untreated they will progressively increase. As the distortion of the capsule wall increases the pressure is placed internally on the lamina interface. This distortion causes an outward mechanical pressure of the capsule and this could cause the lamina to have problems maintaining connection with the pedal bone and the ability of the hoof wall to hold its alignment and shape.

It is worth noting that even the slightest distortion of the hoof wall can cause internal stress and a change in the stance of the animal. This changing of the orthopaedic stance of the horse can cause a change in the way the animal will load that limb. These changes could show up as compensatory patterns in the upper body of the animal.

Animals Response:

As every animal is an individual they can respond in many different ways when they have a problem in the hoof. Some horses will become extremely sore or lame with just the first indications of any problems while other can show no signs of soreness and remain sound with an advanced amount of distortion or flaring. It will depend on the animal and the amount of separation that gets in behind the hoof capsule wall as to how the animal deals with the problem. The work load that is asked of the horse will also have an influence on the internal structures of the foot and the response of the animal.

What Can You Do?

The treatment of this complaint depends on the amount and depth of the damage to the foot. If it is mild, then a good rebalancing of the foot will usually fix the problem over time, however if the flare of the foot is large the separation in behind the wall will be significant. These types of flares need to be treated seriously and quickly as prolonging treatment will cause more damage to the hoof. It is recommended that if your horse is showing any signs of hoof flares, that you have a professional consultant who understands these major structural defects advise you on the correct course of action to reverse the damage that is taking place in the hoof.

Please contact your consultant if you have any concerns.

