**Laminitis**

Laminitis is a severe disease of horses affecting the feet. Because the front feet carry more weight than the back feet, it usually affects them worse.

The skeletal system is connected to the hoof via “laminae” which connect the pedal bone to the inside of the hoof wall. The way the laminae support the body has been likened to a “hammock”.

When the laminae are damaged, the weight of the horse pushes the pedal bone down. At the same time the flexor tendon is pulling upwards which causes the bone to rotate. Other effects include the separation of the sole from the hoof wall at the white line, predisposing to seedy toe and foot abscesses, the toe growing outwards and the sole dropping.

Any one of these is serious, but combined they can be catastrophic.

What is the cause of laminitis? In New Zealand the most common cause is the flush of high carbohydrate spring grass. The high sugar level causes an upset in the large colon, resulting in a release of endotoxins which damage the laminae by altering the blood flow to the hooves, especially in overweight or obese horses

The next most common cause in our practice is the effect of endotoxins released by bacteria infecting the uterus, where the mare has retained foetal membranes (RFM). This is why we take RFM’s so seriously in mares, and always check the placenta to make sure it has all been passed.

Other causes include certain drugs, excessive concussion and gorging on grain, (often in ponies after breaking into the feed room).

We recognise two forms of laminitis, acute and chronic. Acute is where the symptoms come on very suddenly, and there is severe inflammation in the hooves. These cases have not got the pedal bone or laminae damage yet, and need early treatment with anti-inflammatory, usually phenylbutazone, to avoid this.

The chronic form is the type we see more commonly in ponies and overweight horses. The disease is an ongoing and recurring problem with flare ups. These horses have structural damage to the whole hoof and especially the pedal bone, so x-rays are vital.

As you can see, laminitis is a complex disease and each case is different. For this reason, your veterinarian needs to work with you and advise on a feeding regime, and with your farrier on a trimming and perhaps a shoeing program that is best suited for your horse.