

Keratomas explained



Vet Mark Sanderson of Severn Edge Equine Vets gives us the lowdown on a rare form of hoof tumour known as a keratoma



This photo shows a hoof four days after surgery to remove a keratoma

The condition

Tricky to spot, often with little or no associated lameness, a keratoma is a rare lesion, often considered to be a tumour of the keratin-producing cells of the epidermal laminae.

These cells sit at the top of the hoof wall at the coronary band, where they produce the hard hoof capsule that

grows down from the coronary band, in a similar way to how our fingernails grow from the cuticles.

However, if these cells are affected by a tumour, a mass can occur between the outer hoof wall and the pedal bone, this is known as a keratoma.

There are two basic types - cylindrical

and spherical. Typically speaking, the cylindrical form of the disease originates at the coronary band and gradually grows downwards - whereas the spherical form may be found at any site on the dorsal hoof wall, ie at the front of the foot.

Symptoms & diagnosis

Most keratomas are found at the front of the foot, and the pressure of the tumour pressing against the hoof wall may distort the foot's shape. This is one of the signs of the condition - although, in some cases, the hoof looks no different.

Add to this the fact that the horse may not be lame (this varies from

animal to animal) and you can see why this type of tumour can be difficult to spot.

Keratomas have a white, flaky appearance, and this is usually easy to differentiate from the sole, so making it another visible sign of the disease. However, one of the biggest 'tells' is a deviation in the

white line towards the centre of the hoof, so your farrier may spot this at a routine trim.

If your vet suspects a keratoma, X-rays are the next diagnostic step. Pressure from the tumour can affect the bones in the hoof which will show on an X-ray differentiating the lesion from an infection.

Prevention

Sadly, there's no way to prevent a keratoma, and no known cause. The prognosis following surgery is fair to guarded.

While a full recovery is possible, as our case study on the right proves, even after the most invasive surgery, the tumour may recur up to several years later.

If there is any associated lameness, this usually resolves itself rapidly following surgery. However, it is often many months before most horses can return to full exercise. Any breed or type of horse can be affected, and as it's a rare disorder it is often overlooked by vets.



Horses can recover and return to full work following keratoma removal

Treatment

If your horse develops a keratoma, the only treatment is to surgically remove the abnormal growth, either under a general or local anaesthetic.

The tumour must be completely removed up to its origin, and support given to the hoof wall while it heals.

The hole that's left in the hoof wall after surgery can be filled with artificial horn, usually in the form of a putty, as soon as the sensitive laminae have healed, which usually takes a few days. The fitting of a hospital plate is then necessary to hold the hoof together,

support healing and ensure the foot has the best chance of recovery.

In the longer term, the help and support of a good farrier is essential. A bar shoe with clips on should be applied either side of the defect to support the foot.

"It happened to me"



Your Horse reader Nikki Abbott, who lives in Johannesburg in South Africa.

"For six months Talkative suffered an abnormal number of abscesses. We only discovered the keratoma because my farrier had to dig really deep to find the source of the last abscess.

"I'd never even heard of a keratoma until my Thoroughbred, Talkative, was diagnosed with one earlier this year," says

"My vet took some X-rays to confirm the diagnosis and then worked with my farrier to remove the tumour under local anaesthetic (see below), which was about 4cm long and 1cm in diameter.

"He later explained that the repeated abscesses were due to a secondary infection caused by the disease.

"Four days after the operation my vet and farrier filled the

hole left by the operation with Equilox Hoof Putty. When this was removed a few weeks later, Talkative was left with just a small hole in his hoof wall. It was amazing to see how fast his foot had recovered.

"Now, four months on from the operation, Talkative is back in full work. Since the keratoma has been removed he's become much more forward going and relaxed when doing certain schooling exercises, so it was obviously bothering him much more than I had realised.

"At the end of April this year, Talkative did his first show jumping competition since the keratoma was diagnosed (see photo, left).

He's proof that there's life after a tumour like this and it's really fantastic to have my horse back."



Talkative is now back jumping, having recovered from a keratoma



1 The keratoma was removed under local anaesthetic



2 Talkative's foot was then left to heal for four days



3 Hoof putty was used to fill the hole and keep his foot stable

With thanks to Mark Sanderson and the team at Severn Edge Equine Vets in Aston Munslow in Shropshire for their help with this feature. For more information, visit their website at www.severnedgevets.co.uk or call 01584 841080.