A keratoma is a type of benign tumour that grows inside the foot. It originates from the horn producing cells, usually underneath the coronet, and grows down the foot with the normal hoof. When they reach the white line area at the toe, they cause separation of the bond between the hoof wall and sole. Once bacteria penetrate the foot, an abscess forms. Typically, the abscess will look like any other foot abscess and will initially be treated in the normal way by opening it to allow drainage and poulticing the foot. An underlying keratoma will always cause the abscess to recur.

Diagnosis

- Given that a foot abscess is usually the first sign associated with a keratoma, it is only after a patient has suffered two or more abscesses at the same site that the vet will get suspicious that there may be more than just an abscess present.
- Diagnosis of a keratoma is made following radiographic (x-ray) examination of the foot. Pressure from the keratoma normally results in the appearance of an indentation in the coffin bone inside the hoof on the x-ray, due to loss of calcium in the bone.
- Once diagnosed, a keratoma will require surgical removal, either under general anaesthesia or standing sedation, depending on the surgeon’s preference.

KERATOMAS - KEY POINTS:

- are an uncommon cause of lameness;
- cause recurrent foot abscesses in same place;
- can result in a bulge in the hoof wall;
- require surgical removal;
- the surgical site has a prolonged period of healing as the hoof wall regrows slowly.
Surgical removal of a keratoma involves first identifying the exact site of the tumour, followed by removal of an area of outer hoof wall, using an electrical burr. This allows access to the tumour, located between the hoof wall and the deeper sensitive tissues.

It is important to identify and remove the top end of the tumour beneath the coronary band, which means the surgeon often has to remove a relatively large area of horn up to the coronet.

During surgery, bleeding is controlled with the use of a tourniquet. Once identified, the keratoma can be carefully separated from the surrounding tissues and removed.

Laboratory examination may be necessary to confirm the diagnosis.

Treatment of the remaining wound in the hoof wall is a prolonged process on-going over several months. In the immediate post-operative period, wound dressings are applied and changed regularly to control bleeding and infection.

Antibiotics can be used initially to help minimise infection and painkillers are usually necessary for several weeks after surgery.

A special shoe is often used to stabilise the weakened hoof during the healing period.

Frequency of bandage changes can be reduced as the healing progresses. After about eight to twelve weeks a thin layer of horn has usually formed over the defect, allowing the foot to be left un-bandaged.

Depending on the rate of hoof growth, the defect may take up to a year to grow out completely. However, once a layer of horn has formed, the defect can be filled with synthetic resin and, as long as the patient is not lame, light work can be resumed.

Recurrence of a keratoma after surgery is uncommon. Being a benign growth, keratomas do not spread, so, once recovered, the long term prognosis for soundness is very good.

**SURGICAL REMOVAL OF A KERATOMA:**

- Burring the hoof wall under sedation
- Removal of tumour
- Stabilising shoe

For further information contact your local XLVets Equine practice: