Horse Health:

Sarcoids

What are they?

Equine sarcoids are the most common type of skin tumour in horses worldwide.

In a recent UK study, 5.8% of owners reported that their horse had at least one sarcoid. Although they are technically benign, in that they do not metastasise, they can grow in an invasive and aggressive manner and, if left untreated, can interfere with tack and cause significant local problems, e.g. with eyelid function if they are in that region. If they become ulcerated, they can also attract flies.

Because the word “benign” can sound as though it is not something to worry about, or perhaps because sarcoids are so common, it can be tempting to delay seeking treatment, but any delay may make treatment more complex.

What causes them?

It is widely accepted that sarcoids are triggered by a virus, namely bovine papillomavirus type 1 or 2 (BPV-1, BPV-2), which infects skin cells through abrasions or minor wounds and is likely spread by flies or secondary to wounds. This may be why sarcoids are more common in regions that flies like, e.g. the groin or eyelids.

What horses are at risk?

Horses of any age can be affected, but sarcoids are usually first noticed

between the ages of 3 and 10. There is some evidence of breed predisposition, with Arabs being most susceptible and Lipizzaners least. However, this is poorly understood at present, so other factors are likely to influence the risk of sarcoids.

What are the symptoms?

Sarcoids are often first mistaken for a patch of ringworm or a small abrasion. They are more commonly associated with areas such as the eyes, base of the ear, groin or girth, or the site of a wound. They can be very easy to miss, particularly if you have a hairy pony in wintertime. Sarcoids appear in several distinct forms, which vary in size, appearance and severity.

Six main types are recognised:

- **Occult:** These are flat, hairless and may look like rub marks or ringworm.
- **Verrucous:** Tend to be wart-like, scaly lesions with a rough surface.
- **Nodular:** Firm lumps under or within the skin
- **Fibroblastic:** Fleshy, ulcerated, often fast-growing lesions that can bleed easily.
- **Mixed:** Lesions showing features of more than one type, these are the most common.
- **Malevolent (or malignant):** Rare, aggressive sarcoids that spread rapidly through the skin and underlying tissues.

How are they diagnosed?

Diagnosis is usually based on typical appearance, with experienced vets often able to diagnose by sight and palpation. Taking a photograph with a ruler next to the sarcoid every few weeks or months is a very useful thing to do, as it allows the vet to assess growth over time. Very occasionally,

a biopsy may be performed, but it is worth bearing in mind that the biopsy itself can sometimes trigger more aggressive growth, so biopsy should only be undertaken if you intend to treat.

How can they be treated or managed?

Unfortunately, there is no one-size-fits-all cure for sarcoids. Treatment depends on a multitude of factors, such as lesion type, size, location and recurrence risk as well as finances.

There are multiple options, each more suitable in some cases and less in others:

- **Medicated cream:** One of the more common treatment options is the topical application of certain prescription creams, such as those containing AW formulations, 5-fluorouracil (5-FU), or imiquimod. Any of these must be prescribed by your vet. These can be effective for superficial or early lesions. However, they are not always suitable for areas such as those close to the eye. There is also a risk of damage to the surrounding tissue associated with these creams. They are often used as a first line as they are easy to apply and relatively cost effective. However, success rates vary widely, and owners should be aware that there is a risk of treatment failure.
- **Surgical excision:** This approach is occasionally used, however there is a significant chance of regrowth with this treatment option if it is difficult to remove the tumour without significantly large margins. This option is often combined with another treatment such as cryotherapy to increase the success rate.
- **Cryotherapy:** Used alone may be useful in smaller, selected cases and is a treatment that can be carried out relatively easily.
- **Laser surgery:** Another well established and quite successful form of treatment. This is where the sarcoid is removed surgically with a

cutting laser. The laser beam will kill sarcoid cells, so this form of treatment has a higher success rate than conventional surgery.

- **Radiation therapy:** This advanced technique has one of the best success rates. However, this can only be carried out in one of a small number of referral centres within the UK and as such can be quite an expensive option.

With all treatment options, many horses require multiple treatments or combination therapies and there is always a risk of recurrence. In general, the greater the number of different treatments used, the lower the chance of a successful outcome.

Many homeopathic or naturopathic treatments are available over the counter in the UK; however, caution should be advised as these treatments do not have a high success rate and may even have a negative impact on future treatments.

Can they be prevented?

At the present time, there is no reliable, scientifically proven way of preventing the disease. However, as we know that they may form in wounds, early treatment and good wound management may help to reduce the risk. Good fly control measures and keeping horses with a wound apart from horses with sarcoids may also be helpful.

The most important thing to remember is that early diagnosis and prompt treatment will allow the greatest chance of a successful outcome.