THE EQUINE SARCOID.

What are sarcoids?

Sarcoids are skin tumours that can affect any breed of horse and pony. There is compelling evidence to suggest that sarcoids are caused by a cattle virus (bovine papillomavirus or BPV), which belongs to the same family of viruses that is known to induce cancer in other species (such as cervical cancer in humans). Sarcoids are not only often locally aggressive, but they also frequently occur at numerous sites on affected animals.

Why are they important?

Sarcoids are common: surveys suggest that some 7 to 10 % of horses in the UK are affected by them. Moreover, sarcoids are the most frequently-encountered form of equine cancer (representing over 30% of equine cancer cases in most studies). They are unsightly, can achieve a considerable size and may interfere with tack, rendering affected animals unable to work. When ulcerated, they are an obvious cause of discomfort; this is exacerbated in the warmer months by the irritation caused by flies that gather to feed on the exudate. Hence, sarcoids are not only responsible for failures at pre-purchase examinations, but are also the most common skin-related cause of euthanasia in horses and ponies.

How do I recognise them?

Sarcoids can be differentiated into six different categories. These different forms of the tumour each carry a variable prognosis in terms of the horse’s treatment:

- **Nodular**: Discrete, firm spheres within the skin (sometimes described as “grapes”).
- **Fibroblastic**: Aggressive and common. These tumours are often associated with previous wound sites. Fibroblastic sarcoids are frequently multiple, large and ulcerated [Figure 1].
- **Verrucous**: Areas of scaly skin which are often raised [Figure 2]. Untreated, these plaques can extend over very considerable areas and may progress to the more aggressive fibroblastic form.
- **Occult**: Subtle areas of hair loss. These lesions can be mistaken for ringworm or rain scald. Again, if untreated, these lesions often progress to the more aggressive forms of sarcoid.
- **Mixed**: Any two or more of the above present on a single patient.
- **Malevolent**: A rare but highly aggressive form of tumour that spreads via the lymphatic system and/or blood vessels. If treated early in the disease course, these tumours can be managed; if left, the prognosis becomes hopeless.
**Figure 1:** Fibroblastic sarcoids affecting a gelding’s sheath and his groin area.

**Figure 2:** A large verrucous sarcoid on the crest of polo pony.
Are there risk factors?

Studies suggest that certain bloodlines are more prone to developing sarcoids and this is due to mutations in those genes that would normally help to suppress cancers: some French and Swiss Warmblood lines, for example, have been shown to be nine times more at risk.

Flies are implicated in spreading sarcoids from infected to non-infected horses. Suitable precautions to prevent fly transmission of the virus should therefore be taken when horses with sarcoids are kept in close proximity to non-affected animals.

Can sarcoids be treated?

The plethora of different treatment options demonstrates that no single treatment is 100% effective. Moreover, the choice of treatment may be additionally determined by other factors, such as the sarcoid’s location on the body and whether it is an aggressive type of lesion. It is important however, that these tumours are treated as early as possible and with an appropriate, recognised method. Treatment options include:

- Radiotherapy.
- Topical, cytotoxic creams, which destroy the tumour cells.
- Surgical removal of the entire sarcoid using techniques such as cryo-surgery or laser-surgery.

At John Brook Vets, in conjunction with Jeremy Kemp-Symonds, we are fortunate to be one of a very few equine practices in the UK with a powerful Class 4 carbon dioxide laser: this is a preferred method of treatment for many of the sarcoid cases that we see, as we have found that it produces few complications, a very low rate of tumour re-growth compared to other treatment methods and both a swift recovery and a rapid return to work for the patient. Also in conjunction with Jeremy, we are also able to offer photodynamic therapy (PDT), which is a very novel therapy for more superficial sarcoids and other skin tumours.