SARCOIDS

Sarcoids are probably the most common skin tumour found in horses worldwide. They occur in all breeds and types, all colours and in both sexes. Sarcoids can develop at any age. Although most cases are first noticed between 2 and 10 years of age, individual cases can start at any age up to the late 30's.

They should be viewed as a form of skin cancer due to the behaviour of the tumours, the difficulties encountered in treatment, the tendency to recur and the spread across the body from site to site. They only affect the skin and underlying tissues and do not spread to internal organs.

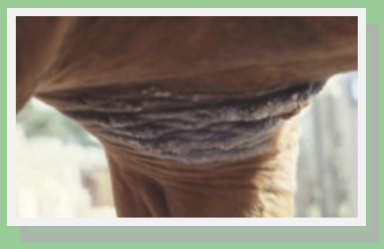
Sarcoids commonly occur in areas where there is little hair cover, areas which tend to sweat and areas of thin skin. The distribution of lesions also implies that flies play a significant role in spreading lesions. Virus like material has been found in large numbers of sarcoids, but no actual active virus particle has been found, so they are not contagious as such.

The commonest sites for sarcoids (in the UK) include the axilla (the 'armpit' of the front leg), groin, face, scrotum and sheath.

Sarcoids behave differently on different horses. An individual may have one or two small lesions, which remain unchanged for years, whilst others may have a few lesions which rapidly multiply. A very few individuals show spontaneous remission, which interestingly mean they will not develop further lesions.

There are six recognised forms, each having a different appearance and some being more aggressive than others.

Occult: Grey hairless, circular area. Can be quite indistinct.



Verrucose: Grey, scabby/warty appearance, often with small nodules within.

Nodular: Firm rounded nodules under the skin. Some ulcerate and bleed.

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Fibroblastic: Fleshy masses, bleed easily and can be quite extensive.

Mixed: More than one form of Sarcoid in a single lesion.

Malignant: Rare form. Most aggressive. Multiple invasive nodular and fibroblastic sarcoids extending through skin and sometimes into lymphatics.

Diagnosis of sarcoids is usually based on appearance. Biopsies are rarely taken as this risks aggravating the sarcoid, which can cause it to convert from a milder form to a more aggressive fibroblastic form.

Treatment:

- Do not wait for the condition to get better – it probably will not.
- It is generally more successful to treat them when they are small and less significant rather than waiting and then having to try to treat a larger area that may have ulcerated.
- Do not expect a 100% cure rate. This is unrealistic and unhelpful. Realistically the prognosis for treatment is around 40 – 60% although radiation and BCG around the eye carries a higher prognosis.
- The best possible treatment should be applied on the first occasion.
- Dabbling with treatments recommended by people other than your vet is dangerous.
- These cheap, ineffective treatments are probably the most expensive in the end.
- Do not be surprised if your vet advises that the lesion be left alone – in some circumstances this is the correct thing to do but in others it is not.

In most cases we will treat the sarcoids either topically or by laser removal.

- **Topical** – A heavy metal based cream called AW4-LUDES is probably the most commonly used treatment in general practice. Its use is controlled by Liverpool University and can only be applied by vets. It has quite good results in all types, but does have some side-effects: Treated horses often have significant swelling, pain and may be dull following treatment. This is simply a product of the penetrative quality of the material and its ability to penetrate to the depths of a sarcoid lesion. If there is a period of some discomfort following application, then pain killers may be required.
- **Laser excision** – This can be performed at our Equine Clinic by our visiting surgeon Jeremy Kemp-Symonds. A laser is used rather than a scalpel as the laser minimises both bleeding and the potential 'seeding' of tumour cells. Tumour remission rates are high at over 90%. The sarcoid is removed on one day rather than the more protracted timescale associated with topical treatment and side-effects are less likely. Sometimes a general anaesthetic is required for this procedure dependent on the location and severity of the sarcoids.

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Sarcoids around the eye are more difficult.

Treatments available include:

- ♦ **Radiation** - Treatment with gamma radiation is expensive, has considerable safety implications, and can only be carried out at two sites in the UK. Its use is restricted to small lesions usually around the eye or over joints, where it has an almost 100% success rate. Iridium wires are inserted into the sarcoid and continuously emit gamma electromagnetic radiation causing local cell destruction. Cosmetic results are usually very good.

- ♦ **Photodynamic Therapy** – This can also be performed at our Equine Clinic by our visiting surgeon Jeremy Kemp-Symonds. This method relies on the ability of cells to absorb a photodynamic chemical, which is either delivered into the lesion via the blood stream, following an injection, or delivered directly to the tumour site topically. The chemical causes significant cell damage when the treated tissue is subjected to light of an appropriate wavelength (the various agents have different wave lengths of light that “activate” them.)

- ♦ **BCG vaccine** - This method works reasonably well for nodular and fibroblastic lesions around the eyes. The method has significant risks and so careful supportive medication is required at the time of each injection. The treated lesion usually turns black and hard and then gradually separates from the underlying normal tissues.

Each horse/pony/donkey with a sarcoid needs to be assessed individually to decide the best course of treatment.

Effective treatment is more likely if lesions are treated early.

Sensible precautions include good fly control, especially for those with lesions, and good wound management as sarcoids can grow rapidly at wound sites.