



## **GREY HORSE MELANOMA**

Eventually 80% of all grey horses will develop a melanoma. The good news is that they are very rarely fatal. 99% of all grey horse melanomas are benign but this doesn't mean that they will not turn malignant in time, however most horses will die of old age before dying as a direct result of the melanoma itself.

A study conducted by the University of Queensland suggests that most grey horses have heavily pigmented internal lesions which show signs of non malignancy because they appear to occur along set paths rather than spreading to other parts of the horse, including vital organs and they also very rarely affected the horse causing death. The research suggests that the slow growing masses were caused by hair follicles that lost their ability to produce pigment or to pass it onto growing hair, caused by age and changes in the cells; that pigment building up into the grey horse melanoma (a tumour of the melanocyte cell). In short, melanoma is a cancer that develops in the melanin cells of the skin. Melanin being the pigment that makes some skin darker than others and although horses of any colour can get a melanoma, they are most common in grey horses.

The bad news is that melanoma in non-grey horses are mostly malignant and potentially aggressive.

Melanomas can be hard, soft, singular or in clusters. They are mostly found around the horse's anus and the underside of the tail, around the sheath, on the head and ears, or around the parotid gland and around the throatlatch area. They can also be found on the legs and girth area. The rate of growth will depend on each horse with some growing quickly and others growing very slowly.

If the tumour is small and not causing the horse any problems, they are best left alone, as surgically removing it can activate the cells and increase the likelihood of the tumour regrowing bigger and more aggressive than before surgery.

Many small melanomas can hang around for years, not changing or growing very slowly and it's best to monitor your horse to check for frequent changes in size, shape and appearance.

If your horse has a melanoma which does need treatment there are a number of different options.

### *Surgery*

Surgery should only be considered where the mass is less than 3cm in diameter and in an area which isn't close to vital nerves and vessels. Larger masses can be extremely

problematic because they commonly reoccur more aggressively and in clusters which can cause a real mess.

### *Cryotherapy*

This is freezing with liquid nitrogen. In most cases a large part of the mass is surgically removed first and then the rest frozen two to three times. This procedure does need repeating to keep the tumour to a manageable size.

### *Cimetidine Therapy*

As the founder of Save a Horse Australia Horse Rescue and Sanctuary, I have seen many grey horses with melanoma and this is the treatment that we prefer. It is one of the most promising advances in the treatment for grey horse melanoma in the world and was originally used as a human anti-ulcer drug called Tagament.

Cimetidine provides the greatest benefit to horses with melanomas which are actively increasing in size and number. It doesn't have much benefit to slow growing masses.

The drug treats the melanoma by modifying the portion of the immune system that allows melanomas to grow unchecked and stimulates the cell mediation immune response needed to fight the tumour.

Currently there isn't any way of knowing which horses will respond to the drug and those that won't. A good response to treatment is typically assessed by a decrease of approximately 50% in the size and number of the melanomas with no further progression of the grey horse disease for several years.

Changes in the size and number of the melanomas during treatment, should occur after 2 – 7 weeks of treatment. The good news is that the drug isn't overly expensive and can be purchased through any veterinarian.

### *Vaccination*

I have been told that there is research continuing in the USA for the development of a tissue based vaccine made from the horses own tumour cells which will combat the melanoma. Clinical studies have seen success for melanomas on the face, body and legs but masses on the tail sheath and along the jugular have not seen the same success. I'm not sure when or if this vaccination will be available in Australia.

If your horse has grey horse melanomas, it is extremely important to keep him as healthy as possible - taking on a natural diet and supplement plan. This will help maintain a strong immune system. Feeding your horse as natural as possible is the most important factor. This can prove quite difficult at times, due to horses needing a large grazing area with access to different plants growing in different soils. In a paddocked environment it is important to supplement with a good quality herbal vitamin and mineral supplement.

Please note that this is different from commercial vitamin and mineral supplements and it's best to contact your local equine herbal supplier for a natural alternative. Yatala Produce in Yatala is an herbal supplier and can help with a natural herbal blend for your horse.

Melanomas are not a death sentence for your horse and with the correct management you will have your equine friend with you for a very long time with the lumps causing no

problems. However they can sit dormant for years and without warning can turn malignant. Always have your horse assessed by a professional veterinarian.

This article is not a substitute for professional veterinarian advice.

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