



Searching for Squamous Cell Carcinoma

By Ellen Weaver, DVM

When first detected, the pink mass at the edge of your horse's eye can easily be mistaken for conjunctivitis or a potential summer sore. However, an important diagnosis to be aware of is a type of cancer called Squamous Cell Carcinoma (SCC.) Although cancer is a frightening word to hear, Squamous Cell Carcinoma, with a quick diagnosis, careful monitoring, and prompt treatment often has a fair to good prognosis.

Squamous Cell Carcinoma is described as the most common neoplasm of the equine eye and overall, is the second most common cancer affecting the horse. Areas of the eye that are typically affected include the conjunctiva of the eyelids and cornea, third eyelid and eyelids. This type of neoplasia tends to be locally invasive and slow to metastasize to other areas of the body, although metastasis to the local lymph nodes, salivary gland and thorax may occur.

SCC develops due to ultraviolet light exposure, which changes the normal function of certain genes that regulate cell growth and proliferation. When disruption of these genes occurs, this causes increased growth and production of cells. Due to the risk factor of ultraviolet light exposure causing this disease, horses lacking pigmentation around the eye are often at higher risk of being diagnosed with SCC and breeds that are more prone to this are appaloosas and paints.

Detection of this disease begins with an overall examination. While grooming, it is easy to monitor your horse for scratches, skin issues, and hoof care. However, examination of the eye should also be performed, observing for nodules, changes in color, and ulcerative areas around the orbit of the eye. Clinical features of SCC to look for are pink to white, raised regions of the third eyelid, eye or eyelid which can have a cobblestone or cauliflower like appearance and on occasion, the tumor can become necrotic with a fetid odor.

On physical exam, findings may include disproportionate facial symmetry and eyelash position, with a painful eye showing deviation of the eyelashes towards the ground along with squinting or tearing. While examining the horse, your veterinarian will palpate regional lymph nodes and the parotid salivary gland, as these structures can become infiltrated with SCC if the cancer has metastasized. Although, these features are often indicative of Squamous Cell Carcinoma, taking a biopsy of the tissue and sending the sample to a lab for histopathology must be completed in order to determine the definitive diagnosis.

Once the diagnosis of SCC has been made, a treatment plan should be made with your veterinarian. Different treatment options include surgically removing the tumor, cryotherapy (the utilization of liquid nitrogen to freeze tissue,) chemotherapy and radiation treatments. Often, combined therapy utilizing surgical excision alongside one of the above mentioned treatments will be completed as this offers the best prognosis. An oral treatment, Piroxicam may also be prescribed, which assists with decreasing the return of cancer cells.

Contact Brandon Equine Medical Center at 813-643-7177 or email info@brandonequine.com with any questions regarding this topic.

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