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Feelin' the Burn

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Summer in Florida can be quite challenging for horse owners as they battle the extreme temperatures. Something every horse owner should know is that ultraviolet B rays produced by the sun can cause sunburn and photosensitization in our equine companions. Horses with white or light skin or hair are at the most risk.

Sunburn occurs with excessive exposure to ultraviolet B (UVB) light. The affected areas usually become red and scaly. The most commonly affected areas are the white or lightly pigmented areas such as the muzzle, eyelids and white spots on the neck and back. White spots on the ventral abdomen are usually normal as they are not exposed to constant sunlight. If sunburn is severe, ulceration and sloughing of the skin can occur. The best way to protect horses from sunburn is to keep them inside during periods of intense sunlight and apply water-repellent sunscreen to light skinned areas when they will be in direct sunlight. Fly masks (with muzzle covers) and fly sheets with UVB protection are also very helpful

Photosensitization is a condition where the skin becomes overly sensitive to sunlight. It looks very similar to sunburn, but occurs for different reasons. Photodynamic agents are deposited in the skin and when exposed to sunlight absorb energy. When the energy decreases, chemical compounds damage the skin. Photosensitivity can be systemic (primary photosensitivity) or contact (secondary photosensitivity). Systemic photosensitivity can be caused by plants such as St. John's wort, buckwheat, perennial rye grass and burr trefoil. Commonly these plants are located on pastures that are poor quality and contain a lot of weeds. Certain chemicals, such as some antibiotics, dyes and tranquilizers can also cause primary photosensitivity. Contact photosensitivity is caused by ingestion of toxic plants, chemicals, infection or neoplasms that cause liver impairment. Some plants that cause secondary photosensitivity are asklike clover, blue-green algae and fungi.

Diagnosis of photosensitization is based on clinical signs, history and liver function tests. In order to treat photosensitization, the underlying cause needs to be determined and removed from the environment. If a plant is the suspected cause, but cannot be identified, the best way to prevent photosensitization is to keep horses in during the day and then put them out on pasture at night.

Prevention of sunburn and photosensitivity is key and involves many management changes. However, if sunburn or photosensitivity are suspected, a veterinarian should always evaluate the horse in order to determine the extent of the damage and the underlying cause. A veterinarian can also prescribe appropriate treatment.

A word about sunscreen: Sunscreens are a combination of ingredients that help prevent the suns ultraviolet radiation from reaching the skin. The SPF (sun protective factor) is a measure of a sunscreens ability to prevent UVB from damaging the skin. SPF 15 filters out approximately 93% of all incoming UVB rays, SPF 30 keeps out 97% and SPF 50 keeps out 98%. Sunscreen must be applied a half hour prior to sun exposure and then reapplied every 2 hours in order to be effective. Water-repellent sunscreens may be more effective due to sweating and grazing in damp pastures. There are some sunscreens made specifically for animals, however human products can be used with caution. When trying a new sunscreen, test a small area of skin to be sure there is no adverse reaction. Avoid contact with the eyes. If an adverse reaction occurs, wash the area well and call a veterinarian.

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

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