

Equine Skin Conditions: Part 2

This article discusses skin-related problems that primarily affect horses during the summertime. Equine skin problems arise more frequently during the summer months for several reasons. First, horses tend to be more active. They are ridden more and are reproductively active and so they tend to incur more injuries and skin wounds and are exposed to infectious diseases. Second, intense summer solar radiation causes sunburn and photosensitization. Third, flies and other insects contribute to a whole host of different skin-associated problems and other diseases. Understanding how these factors contribute to equine skin diseases gives us clues as to how to prepare for and avoid these troublesome problems.

THE ACTIVE SUMMER LIFESTYLE

The fact that horses are more active in the summer means that there are more opportunities for accidents that result in skin wounds. More travel means more stress and contact with other horses, increasing exposure to contagious skin disease like Equine Ringworm. This disease results typically in circular areas of hair loss and peeling. It is not caused by a worm but by a fungus called a Dermatophyte. Horses are ridden more and as a result we see more problems like “girth itch” also caused by Dermatophyte, and saddle sores. Girth itch is a fungal infection of the skin under the saddle and is common in working horses and is often spread by infected tack. Saddle sores are a common problem in summer and are usually seen in horses ridden with ill fitting tack or poor riding technique.

INTENSE SUMMER SUN

In the Southwest, sunburn is a common problem in non-pigmented skin. At our practice, we see this mostly in the summer because of more intense UV light. Horses with white faces

often sunburn, especially on the muzzle. Paint horses with short coats are often affected, especially those with non-pigmented skin on the top line. High SPF sunscreens, applied and reapplied as needed, can help protect areas that burn. Fly masks and sheets may offer additional protection.

Different from simple sunburn is photosensitization, meaning hypersensitivity to sunlight. Photosensitization appears as severely damaged areas of pink (non-pigmented) skin. The disease process tends to be much more severe than simple sunburn, with the affected areas often severely scabbed and crusted. This problem occurs because of the presence of photoactive plant pigments in the skin which, when contacted by UV light, change to a form that damages the skin. These pigments reach the skin in several ways, either through ingestion or contact. This type of photosensitization is known as primary photosensitization and is caused by only specific plant types. In our area, we commonly see it associated with certain species of clover and even alfalfa, mostly on pasture, but sometimes in hay.

Secondary photosensitization relates to liver dysfunction. A healthy liver is critical to the breakdown of plant pigments found in all plants. When the liver does not function properly, these pigments reach high levels in the blood and skin. The pigments then react to UV light and damage the skin. As with primary photosensitization, this does not occur in the same way in pigmented skin because UV light is absorbed and weakened by the dark pigments in the skin. A specific type of photosensitization affects the non-pigmented lower limbs (white socks and stockings) of horses and causes severe crusting and swelling of the limb. Horse owners should understand how plant ingestion and contact can cause damage to white-haired areas.

PESKY INSECTS

Flies are a familiar summertime problem. All equines are irritated by flies but some are more sensitive than others,

with significant breed and individual differences. For example, Thoroughbred horses tend to be more sensitive to flies than some of the “thicker skinned” breeds. Culicoides hypersensitivity is an allergic skin disease caused by hypersensitivity to the night biting midge Culicoides, small black flies that are also known as “no-see-ums.” They are mostly active at night. While all affected horses are irritated by these insects, some develop allergy to them.

The classic appearance of allergic skin reactions in horses is peeling, crusting and hair loss around the tail head, and/or under the mane. Less frequently, the underline is affected. The horses tend to be very itchy, and so worsen the damage by constant scratching. Horses affected by this problem, in our region at least, are mostly those stabled or pastured near water. Prevention involves understanding that this is a problem caused in the evenings. Thus the most effective prevention is fly control targeted to protect horses during this time.

A common summer problem in our area is hypersensitivity to biting flies like horse and deer flies. As with Culicoides, all horses are bothered and bitten, but only certain horses become allergic and thus become more severely affected. Hypersensitive horses develop hives (wheals) around the neck and shoulders. Fly hypersensitivity can also appear as lines of crusting on the chest.

- Treatment of both these hypersensitivities involves protection from the flies using insecticides and other management techniques.
- It is important to understand that the skin damage and reaction is not directly caused by the insect bite but by the body's over-reaction to the bite. Therefore, steroids and antihistamines are sometimes used for treatment of severe cases in order to dampen the immune response.
- A more recent and holistic treatment is hypo-

sensitization therapy, where tiny amounts of the offending allergen is injected under the skin over months, and until the horse becomes tolerant of it.

There are many ways to control stable flies, none of which are perfect. The most important relate to manure and facility management to minimize the areas which are available for fly reproduction and development. By far the most important point is to remove manure and other waste promptly during fly season. At our facility we combine aggressive manure management with the use of the feed-through insect growth regulating drug found in Solitude IGR, which has made a difference.

PIGEON FEVER

While not really a skin disease, "Pigeon fever" is an important enough disease that I will discuss it briefly. Pigeon Fever (also known as Pigeon Breast or Dryland Distemper) is an infection caused by a bacterial organism that is transmitted by stable flies. This is a very common and troublesome summertime disease in our area. Flies are thought to introduce the bacterial infection into the skin and underlying tissues. The bacteria are carried by the blood stream deeper into the tissues and local lymph nodes, where they cause abscess formation. The abscesses are most common in the deep tissues of the chest. They also commonly occur on the underbelly and sheath areas in geldings.

Abscesses typically are very slow growing and sometimes only appear months later, during the fall and winter months. The disease is called pigeon fever because horses with abscesses of the chest can have a huge protruding chest, like a pigeon. There is no vaccine for the disease. Treatment involves abscess drainage, nursing care and selective use of antibiotics. Most horses eventually recover on their own, but some cases require veterinary care and can take months to resolve.

MANAGEMENT & PREVENTION

- Anticipate the greater level of summer equine activity and how it contributes to skin-related diseases.
- Pay attention to basic issues like stable and trailer safety, proper nutrition, vaccination and parasite control, and tack fit and maintenance.
- Learn to recognize the signs of the commonly seen skin diseases and be on the lookout for them.
- Protect horses from intense UV light and be aware of the difference between sunburn and photosensitization.
- Minimize fly related skin disease by a balanced program of facilities management.
- Maintain contact with your veterinarian so that he or she can help guide you in prevention and treatment of summertime skin problems.

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