Dermatophilosis - Rain Rot

The rainy summer season is upon us here in central Florida. With it comes a variety of skin problems, from insect allergies to solar dermatitis (sunburn), and, particularly with this year's heavy rainfall, dermatophilosis (rain scald). Rain scald is a bacterial infection of the skin surface with *Dermatophilus congolensis*. It is frequently confused with ringworm, partly because of its appearance, and partly because of similar veterinary names. Ringworm is a fungal infection usually caused by *Trichophyton spp* and the veterinary term for ringworm is "Dermatophytosis", hence the confusion. Although ringworm lesions may look similar to those of rain scald, the location tends to be different. Ringworm lesions are typically in the area of the girth and ribcage where the rider's boots would touch the horse's side. They may also be generalized, covering the entire body. Also, in general, ringworm lesions are round, whereas rain scald lesions tend to be oval. Crusting is more typical of rain scald than ringworm.

Dermatophilosis is usually seen over the back, hindquarters, back of pasterns, or on the hind cannons. The disease is frequently worse over white skinned areas. Lesions can be small dry crusts that are easily removed with grooming or rubbing, or they can be larger crusts with yellow-green or gray colored pus underneath them. Early in the infection, removal of crusts or touching the horse in the affected area can cause pain. Hair attached to the crusts tends to fall out easily as the crusts are removed, producing the typical "paintbrush" look that characterizes this disease. Rain soaked skin, or skin that is broken, irritated, or damaged by insect bites or trauma is more likely to develop the disease. Areas of white skin affected with Dermatophilus are also prone to increased photosensitivity (sensitivity to sunlight) which may exacerbate the condition.

Dermatophilosis is contagious and can spread to other animals by contact with the crusts often on the soil where an infected horse has rolled, or by shared tack and grooming kits. The bacteria can live in the crusts for up to 42 months, so control of this disease can be difficult. Diagnosis is usually made by physical examination because the lesions and location are characteristic. In cases that do not follow the typical pattern, microscopic examination of either the pus under the crusts or of the crushed crusts themselves mixed with saline can provide a diagnosis. The bacteria have a characteristic branching "railroad track" appearance. Horses with lesions and increased photosensitivity on white skinned areas should also have blood work done to check liver function as these signs may also indicate liver problems.

Ideally, you should consult with your veterinarian if you suspect your horse has rain rot. The typical treatment is to brush and remove any loose crusts then shampoo with iodine or chlorhexidine scrub or with a shampoo product containing and antibacterial and antifungal products. Leave the shampoo on the skin for 10 minutes then rinse thoroughly. Do this every day for one week then decrease frequency to every three to four days until healed. Shampooing more than this can dry the skin out and cause further irritation. In severe cases your veterinarian may also recommend treatment with penicillin or trimethoprim sulfa.

Some horses are more predisposed to Dermatophilosis than others. To prevent spread of the disease, it is necessary to decrease environmental contamination, and minimize factors that irritate the skin. Dispose of removed crusts in the trash or by burning; do not leave them on the ground. Isolate infected horses. Avoid sharing grooming kits, and always bleach or disinfect grooming tools and areas after use on an affected animal. Decrease trauma to the skin by insects by applying insect spray. Above all, avoid leaving predisposed horses out in the rain and/or dry their skin and hair as thoroughly as possible when you bring them into the barn.

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