

Summer Sores and Habronemiasis

Dr. Karla Lombana, DVM

High temperatures and a sudden increase in flies create multiple new problems here in Tucson and southern Arizona. One of the many infectious agents that flies can carry from horse to horse is habronema, or the causative agent for summer sores. Horses in Arizona are especially prone to habronemiasis due to the extreme heat, and excessive fly levels.

Habronema muscae are stomach worms, which are distributed nationwide. The worms generate eggs and larvae from within the intestinal tract of horses. Habronema larvae are then passed in manure. In a normal life cycle for the parasite the larvae would be re-ingested by the horse, either by flies landing on their mouths or from larval migration onto various plant or forages close to the feces.



Horses are affected when a stable fly deposits the parasite larvae on mucosal surfaces, or any surface where there is a moist interface. When the larvae is deposited onto an external mucosal surface (such as sheaths, eyelids, corners of mouths or wounds) the

larvae begin to develop as they would as if they were in the gastrointestinal tract. The parasites soon perish, as they are not in the appropriate environment; however, their remnants are left buried into abnormal tissues. The dead larvae serve as a nidus of irritation, creating chronic granulomatous inflammation. The parasite itself does not migrate far, but rather the natural inflammatory response of the body causes large lesions.

The diagnosis of a summer sore is made by the presence of a non-healing, reddish brown lesion that contain calcified material. The larvae themselves are often very difficult to individually identify, and are typically identified as the hardened nodules or calcified spots. These are removed and the lesion can be treated with steroids (locally and/or systemically).



An Ounce of Prevention....

Habronemiasis is one of the greatest parasitic causes for inflammation seen in Arizona. The summer heat and heavy fly burden create a perfect environment for habronemiasis.

The first line of defense is prevention. Fly control is critical (masks and sprays) but so is keeping pastures and stalls clean daily. One of the best ways to reduce your horse's exposure is to deworm with an ivermectin or moxidectin based product at the beginning of the summer, effectively reducing the amount of stomach worms that are producing eggs, and therefore minimizing self exposure. We recommend a broad spectrum product such as Quest Plus Gel or Zimectrin Gold.

In large herds, or in densely populated areas, it is relatively impossible to prevent habronemiasis exposure, and so constant and careful monitoring is critical.

Treatment Options

The most effective treatment is to aggressively treat habronema lesions. The larvae within the summer sores are already dead; it is the remnant of the larvae, which cause an aggressive immune response. Therefore, the best way to treat a summer sore is to remove



the source of inflammation (debulk the inflammatory tissue and remove larval remnants). Sometimes it is necessary to inject steroid into the surrounding granulation tissue, to help immediately reduce the inflammation surrounding the larvae.

There are a number of topical remedies that are recommended. We recommend administration of a topical ointment containing a blend of steroid, fly repellent and ivermectin for further larvae depletion. If you are interested in purchasing our habronema ointment please contact us directly at info@jackpotvet.com or call [520-999-3888](tel:520-999-3888) during business hours.

Rapid progression requires owner extreme diligence!

As these sores are not only due to an infectious (parasitic) but an hyperactive immune response, there are a number of factors in their resolution.

First and foremost contact us as soon as you notice a sore. A small summer sore can become very large over just a few days. Persistent topical cleaning and treatment after debridement and injection by your veterinarian is critical.



A wound or sore will attract more flies than usual, and more flies will invariably deposit more larvae, creating a perpetual cycle of overactive immune response. It is very common for these sores to require treatment over and over throughout the summer, as well as daily treatment at home.

Finally, there is a propensity of horses who have had a summer sore in the past to have trouble in the future, so it is imperative to be your horse's first line of defense!