

## Summer Sores

A summer sore is granulomatous skin disease caused by the larva of the equine stomach worm, habronema. To better understand how a stomach worm can cause a skin infection it is important to understand its life cycle. Normally flies deposit the infectious larva near the horse's mouth where they are then swallowed. Once in the stomach the larva mature into adults and begin laying eggs. When the eggs are passed in the manure they are consumed by flies which then hatch into larva starting the cycle over. Where this goes wrong is when the fly deposits the larva elsewhere on the body. Common locations would be wounds, the corner of the eye, the sheath, and the urethra.

The sores are often open, itchy and can resemble several other diseases such as proud flesh, squamous cell carcinoma, sarcoids, and any other granulomatous lesion. Because of this a biopsy (sample of tissue sent to the lab) is very helpful in making a diagnosis. As the name implies these lesions are most common in warm months of the year. Unfortunately a large part of the lesion is due to hypersensitivity (allergy) to the larva so there is no immunity to the disease. This means the same horse can get summer sores year after year.

Because hypersensitivity is a major component of the lesion, steroids are an important part of the treatment. These may be either systemic or topical. Very large lesions may need to be surgically debulked. To kill the larva ivermectin is almost 100% effective. Even horses that are dewormed regularly can have Summer Sores because Ivermectin is completely cleared from the horse's system in 2 weeks. This leaves ample time for infection to occur if the horse is on a typical 2-month worming schedule. Moxidectin (Quest) is also very effective in treating the larvae and has a longer retention time so may be advantageous when treating difficult cases. Fly control is essential in limiting the distribution of the larva. Topical parasiticides may also be used. A combination of therapies will most likely be utilized.

