ELITE EQUINE

Veterinary Services

VS: That time of year....again!!

I have recently had multiple questions about VS, and with restrictions that will impact inter and intrastate traveling to events in the coming months, we thought that we would try and shed some light on VS (vesicular stomatitis) and what to be looking for with your horses. Many of you who have lived in the southwest for any length of time have dealt with VS in previous years(1995,'97, '98, 2004,'05) and know that we usually see the onset of the virus late spring to early summer lasting into the fall. VS can affect horses, cattle, swine, occasionally sheep camelids, goats, and wildlife. Rarely humans are effected but may become infected by the interaction and handling of infected animals.

So vesicular or blister and stomatitis means inflammation of the mouth and lips. How does your horse get the disease? VS is caused by VSV (vesicular stomatitis virus). VSV is transmitted to your horse by a biting insect, most commonly by sand and black flies, but has been found in multiple other insects including deer and horse flies as well as mosquitoes. It can show up in your area by an infected animal being transported to the vicinity and it has been postulated that the reason we might see initial cases in Texas, for example followed by cases in Colorado, is that infected insects are transported long distances by wind currents. Animals that have access to a barn or shelter are at a reduced risk and conversely premises located less than 1/4 of a mile from a source of running water increases the chances of developing VS. It has also been documented that when an animal has vesicles that have ruptured, it is possible for them to spread the virus by direct contact with another animal.

Signs and symptoms usually occur after a viral incubation period of 3 to 7 days. Horses will initially be febrile(have an above normal temperature). The most common symptoms seen are lesions that develop in the mouth. They are generally blanched vesicles, but can be fluid filled. The vesicle rupture and give way to ulcerations and erosions. Consequently your horse may begin to "slobber" or "drool" saliva out of their mouth. Other signs that you may see are crusting or scabbing lesions in areas where the biting insects usually congregate including muzzle, udder, ventral abdomen, and sometimes around the coronary band/pastern. Just

because one horse shows signs of the disease does not mean that all the rest of the horses on your property will develop symptoms. One study reported that the percent of infected horses on a particular premises may be as low as 30-45%. If your veterinarian suspects VS, they are required to report it to the state veterinarian who will make an assessment and may test if there are typical symptoms of VS. They may at that time place your property/horses in quarantine depending upon their assessment.

So if your horse is unfortunate, contracts the virus, and develops clinical signs, how are we going to treat them? Well fortunately in horses the disease is short lived and self limiting. Many effected horses will recover within one to two weeks. Some veterinarians will make up a "mouth wash"(This usually contains a mild antiseptic and may contain a small amount of lidocaine)for your horse to help with the discomfort and prevention of a secondary bacterial infection developing. Other treatments may include the use of an antibiotic cream and nonsteriodal anti-inflamitories. Keeping effected horses eating is important and making a "mash" by adding water to grain or pellets will obviously make it easier for them to eat while the oral ulcerations are present. Resolution of the disease without hospitalization is common, however occasionally dehydration can occur and may necessitate the need for IV fluids. Prognosis is excellent for recovery, providing that complications such as laminitis or secondary bacterial infections do not exist.

There is not a commercially available vaccine for prevention of contracting the virus. In previous outbreaks an inactivated vaccine was shown not to be protective. Obviously anything that can be done to control insect exposure is beneficial.

So if the disease is self limiting in horses what's the big deal? In cattle and swine, the clinical signs seen from VSV are very similar to those seen with Foot(hoof)-and-Mouth Disease, a disease that has been eradicated from the United States, a disease that would cause livestock producers huge financial losses resultant from lost production and depopulation. Consequently any disease that has similar symptoms is taken very seriously by government regulatory agencies.

Be diligent about insect control and preventing exposure to your horses in the coming months especially if you are in an area that increases the risk to your horses and have a safe, enjoyable performance season where ever you are headed.

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