

West Nile Support Protocol

Using Nutrition, Homeopathy and Aromatherapy to Combat West Nile Virus in Horses

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SUMMARY

In the late summer and fall of 2001, West Nile Virus (WNV), a form of encephalitis, occurred for the first time in Florida. It struck horses of all breeds and ages, as well as humans. Veterinarians and horseowners (owners) were at a loss on how to treat the disease in horses, as they had no experience with it. Further, literature indicates that in Eastern Equine Encephalitis, a disease with similar symptoms, when neurological signs are exhibited, death is almost certain within three days. With little to no guidance, veterinarians used a variety of different methods to treat these horses. Some horses died or were euthanized, while others recovered partially or completely.

Frustrated with their horses' deteriorating condition under allopathic care, some owners sought alternative solutions. With the assistance of two holistic veterinarians and cooperating horse owners, I developed an alternative protocol (protocol) for combating WNV through field application with horses exhibiting WNV symptoms. Some of these cases were confirmed with WNV and others were not.

The protocol developed allowed most owners to provide all of the nursing care needs of their horses. Whenever desired, owners' primary veterinarians were kept informed of case developments. A "diary" of treatment using the protocol was given to the state veterinarian for one of the first horses confirmed as having WNV in Florida.

I personally worked with owners of twenty-two horses in north and central Florida in 2001 that used the protocol. The protocol was used on other horses in Florida in 2001, but I have no personal knowledge of the cases. In 2002, I have personally worked with owners of five WNV horses in Alabama, Florida and Michigan, with which the protocol was used. It is highly likely that the protocol has been used on many more horses this year. Horses treated with the protocol had symptoms ranging from mild to severe and their ages ranged from 18 months to thirty-six years. Some were confirmed with WNV, some with symptoms but not confirmed, and others suspected to have Eastern Encephalitis. Of the twenty-two horses with whom this protocol was used in 2001: eight-

een recovered completely, one 36 year old horse was euthanized the day following the start of the treatment at the owner's request; one 18 month old completely recovered only to develop laminitis two months later and was euthanized; one horse died from liver failure a few weeks following recovery from WNV (thought by one of the attending veterinarians to be a result of medications given prior to use of the protocol); and one horse has a slight gait abnormality today. Four of the five horses where the protocol was used this year have fully recovered, and the fifth horse is in the process of recovering. (Postscript: The owner reported that the fifth horse recovered from the West Nile Virus, only to be euthanized five days later from complications of food and liquid being trapped in the lungs).

The protocol utilizes nutrition, homeopathy and aromatherapy. Adjunct measures such as Bach Flowers, Bioscan, and rehydration were used in some cases. Good results were seen in all cases, some more dramatic than others. Based on testimonials, the recovery rate appeared to be more rapid, very successful and with fewer side effects for horses on the protocol than not.

The protocol has been shared with receptive veterinarians and laymen as an alternative or complement to conventional allopathic treatment.

The Disease

West Nile Virus (WNV) is one of several viruses in the Arboviral Encephalitis family. This family of viruses can cause inflammation of the brain and spinal cord and death in humans and animals. Within the Arboviral Encephalitis family are Alphaviruses and Flavaviruses. Alphaviruses include Eastern Equine Encephalomyelitis and Western Equine Encephalomyelitis. Flavaviruses include St. Louis encephalitis and West Nile Virus.

WNV was first discovered in 1937 in a woman in the West Nile province of Uganda in Central Africa. Since then it has been reported in Egypt, Israel, Africa, India, Pakistan, Borneo, Cypress, France, Romania, Thailand, the Philippines, Malaysia, Turkey, Albania and now the United States.

In the United States, it was first identified in the summer of 1999 in New York City, NY. There, flamingos and pheasants exhibited WNV. In 2001, the virus spread to the District of Columbia, Indiana, Georgia, Florida, Louisiana, Maryland, Massachusetts, Michigan, New Jersey, Pennsylvania, New York, Ohio and Canada, hitting Florida particularly hard. In 2002, the virus has spread to horses across the United States.

To illustrate how the virus mutates over time, twenty-three strains of WNV were isolated from children in Egypt during the early 1950s. However, in the United States only a single genet-

ic strain of WNV has been found suggesting that it has not resided here very long.

Statistics on Equine WNV Cases

In 2001, there were 738 cases of equine WNV in 20 states. Of the 738 reported, 651 were verified through blood tests. Of those, 640 were confirmed and 11 were probable. For the 470 horses for which an outcome was reported, 156 (33.2%) died or were euthanized. The peak months for illness were late August – mid October. The Florida Department of Agriculture opined that for every one case that was confirmed there were probably 200 more horses that had contracted the disease, however a local veterinarian in North Florida opined that for every one case confirmed there were probably 400 cases that were not. Also in 2001, 20 horses were confirmed with Eastern Equine Encephalitis, which is normal for any given year in Florida.

In 2002, between January 1 and October 13 there were 10,172 reported cases of equine WNV in 38 states. (Source: USDA, Current WNV Status as of 10/13/02 and Update from Florida Department of Agriculture and Consumer Services telephone conversation on 9/29/02).

The Center for Disease Control has spent more than \$31 million to fight WNV this year alone. That, in addition, to the value of the horses, wildlife and people lost, has made this a costly disease.

Transmission

WNV is a mosquito-borne illness. It travels from mosquito to bird to mosquito and then to humans, horses, and in rare cases other mammals and reptiles. Until a few months ago it was thought that there was no human-to-human or animal-to-human transmission, as humans and horses are dead end hosts. However, there is now evidence that the disease can be transmitted between humans through blood transfusions, organ transplants, and breast milk. You might assume the same would be true for horses.

Symptoms

In horses, symptoms observed in the cases I worked with included drooling, runny nose or eyes, loss of appetite, colic symptoms, lameness symptoms, depression, fever (both elevated and subnormal), swelling of the limbs, twitching of muzzle or other muscles, staggering in front, inability to stand on three legs, weakness in rear, falling or lying down, blank stare, temporary blindness, swelling of the tongue, lips and throat with inability to swallow, introspection, lethargy, and dehydration.

Conventional Allopathic Response

Veterinarians across the nation have been taken by surprise with the WNV. Drawing on their train-

ing and limited WNV knowledge, they have chosen a variety of treatments. Some have adopted a "wait and see" approach, some have treated the horses with stomach drenches of DMSO as much as every other day along with Butazolidin to deal with the symptoms of inflammation, and yet others have recommended euthanasia for horses that were down. For those horses that recovered, their recovery was reportedly slower than horses treated with alternative measures. For those that weren't responding to conventional treatment, the owners reported that when started on the protocol, they began improving drastically and rapidly.

Expenses for treating a typical WNV case with conventional treatment cost owners in Florida an average of \$2,000. Those with limited financial resources, limited ability to care for their own horses, or whose horses were aged chose euthanasia.

The Florida Story and the Protocol

In the summer of 2001, horse owners in Florida began observing non-specific unusual symptoms in their animals that they assumed were known illnesses such as lameness, colic, and flu. Many took a "wait and see" approach. Since the onset of WNV can be many days or just a few hours, some of these horses died without the owner knowing they had WNV. As more of these cases occurred, the State of Florida requested veterinarians to collect blood from horses with unusual symptoms. About the time WNV was identified, the WNV cases had escalated to epidemic proportions. The epidemic continued into the fall. As it turned out, some of the horses tested had EEE, which has a higher fatality rate, but has similar symptoms to WNV. Also, many horses that had WNV antibodies were asymptomatic. (It is thought that up to 60% of horses exposed are asymptomatic.) This could explain the reduction of WNV cases in the north Florida area in 2002, as most horses in this area now have immunity through natural means or through vaccination.

My earliest experience with WNV was in June of 2001 when three of my horses within days of each other began exhibiting signs of muzzle twitching. Without knowing what I was dealing with, I gave them Raindrop Treatments (application of a variety of therapeutic-grade essential oils massaged into various parts of the body) and their muzzle twitching disappeared within three days. I didn't think too much more about it until a few weeks later when horses all over the area began coming down with the same symptoms. Some were dying and some had lingering and debilitating illnesses.

As some horse owners in the area grew frustrated with the lack of progress their horses seemed to be making under conventional veterinary care, they turned to me for help. Those who came to me were very committed to their horses, desperate to help them get well, and exhausted from the 24-hour nursing care they had been giving these horses without improvement. Committed to helping out, I started doing my own research and

developed a preliminary protocol using nutrition, homeopathy, and therapeutic-grade essential oils that the first horse owner could use with her daughter's horse. Each day we would discuss the mare's progress and adjust her ministrations. At the same time I was conferring with Dr. Heather Mack in California and Dr. Gerald Wessner in Florida, both holistic veterinarians, to obtain some guidance on the protocol I was developing and validation that it could work. Neither of them had any experience with WNV at the time.

Using the first horse's dramatic and complete recovery as our model, I refined the protocol with subsequent horse owners' experiences until I was confident that the protocol produced the most rapid and successful results.

Following the second case I worked with, one of my own horses came down with a full-blown case of WNV. Her symptoms were the worst I had seen and the onset was very sudden (within 2 hours). I immediately started using the protocol on her. She never went down on the ground, but she was having great difficulty keeping her hind end under her. She also appeared to be blind. (She subsequently fully recovered.)

At this point, the cases were coming daily, sometimes two and three a day. I coached the owners on the protocol, and helped them obtain the homeopathic remedies, essential oils, and nutritional products they needed. Because the coaching was taking so much time as most of the owners knew nothing of alternative therapies, I developed a laminated protocol sheet owners could take to the barn with them. It had detailed instructions on what to look for and what to do. Owners were starved for information to help their horses recover.

As time passed, some owners who learned of the protocol were having their horses diagnosed by veterinarians and then deciding to treat their horses themselves with the protocol rather than the conventional treatment. At this point, veterinarians weren't even drawing blood any more as the laboratory was overwhelmed and it was taking 2-3 months to get results. Working with one of the area veterinarians who had the preponderance of clients who decided to use the protocol, after he diagnosed the cases, we communicated on how his clients' horses were responding to the protocol and he was called back as needed.

The Protocol

The goal of the protocol is to weaken the virus, boost the immune system so the horse can fight the virus with his own defenses, and support the horse with nutrition and nursing care to hasten recovery. The basic protocol includes nutrition, homeopathy, therapeutic-grade essential oils, and flower essences. Additional modalities used, as needed, are physical support to keep the horses standing, intravenous fluids, and infrared light therapy. If only the basic protocol is used, it costs approximately \$200-\$250 for an owner to take care of the horse in addition to the manpower needed.

Physical Environment

Owners are advised to place horses in an open area away from gates, fences and stall walls. Horses confined were injuring themselves on structures when they fell down or tried to get up.

Horses are kept on their feet if at all possible, even by using slings. If the horse is down, owners are advised to turn the horse over every three hours to prevent circulatory failure.

Homeopathics and the Protocol

Last year and again this year, Gerald Wessner, DVM, Florida, produced West Nile Virus nosodes using blood from WNV positive horses. We understand that WNV nosodes are available from other holistic veterinarians this year as well. Ill horses are given 15 WNV nosodes once a day until the horse is well.

Using the protocol, horses exhibiting acute WNV symptoms are started on all or some of three homeopathic remedies, depending on their symptoms and response to the remedies.

- Belladonna is given to horses with a fever, head hotter than neck, rapid pulse, dilated pupils, or those collapsing. It is given until improvement is seen. Then it is stopped and the horse observed again.
- Arsenicum Album (Arsenicum) 1M is given to horses exhibiting low energy, seeking heat, shivering, having a loose stool, lethargic, or discharging from the eye or nose.
- Aconite 1M is given if the horse has normal energy but heightened sensitivity to touch, noise or light.

Some horses have responded better to Aconite and others to Arsenicum. Sometimes they are alternated for the best response. The homeopathics are used until the acute symptoms begin to abate. Owners are warned not to contaminate the homeopathics with the oils. Gelsemium was used in one case where the throat, lips, and tongue swelled and the horse couldn't swallow.

Dr. Wessner, Florida, treated a number of WNV horses completely with homeopathic remedies with good success. He reported one case this year of a debilitated nursing mare on EPM homeopathic medication that began exhibiting classic symptoms of WNV. She was then treated with Aconite and Arsenicum, the foal was weaned, and in three days the WNV symptoms disappeared. However, it did take the typical three weeks for the mare to completely regain her strength and vitality. Dr. Wessner subsequently changed his homeopathic protocol to include the homeopathic EPM remedy.

Therapeutic-grade Essential Oils and the Protocol

Two blended oils and one single oil are part of the protocol. It is imperative that the oils are therapeutic grade.

- The single oil used is Oregano. It is used for its anti-viral and immune stimulant properties. The single oil of Oregano is used in addition to the

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blend that contains Oregano because single oils and blends act differently (synergistic effect of combinations).

- Blend #1 - One of the blends includes Rosewood, Blue Tansy, Frankincense, Spruce and Almond Oil. This blend is thought to help balance electrical energies, help correct balance, relieve pain, and repair cellular structure.

- Blend #2 - The second blend includes Cistus, Frankincense, Oregano, Idaho Tansy, Cumin, Clove, Hyssop, Ravensara, and Mountain Savory. This blend is used for its ability to fight viruses and strengthen the body.

With the first horses on which the oils were used, the oils were simply applied topically on the spine area, heel bulbs, hind legs, coronary bands, base of neck, chest, inside tips of ears, and on the withers. As time passed, we discovered we could obtain even more rapid results when giving Blend #2 by mouth in corn oil on the first day and Oregano by mouth in corn oil on the second day in addition to applying the oils undiluted topically. The oils are applied topically twice a day until the most acute symptoms began to disappear and then topical application is reduced to once a day, continuing for three days after the symptoms disappear.

Nutrition and the Protocol

Apple Cider Vinegar (with the "Mother" culture in it) at the rate of 50 ml/day for anti-inflammatory action is recommended until the horse is well. Also highly recommended is Ester C powder at the rate of 1 Tablespoon/day for the first three days and then 1 Teaspoon a day for up to a week after the horse has recovered. Additional supplements that some owners have added include 1 Tablespoon a day of powdered or flaked garlic until the horse was well (but not at the same time as the homeopathics), Elderberry extract and Echinacea to boost the immune system, food-grade hydrogen peroxide to oxygenate tissue, Devil's Claw in a vinegar base and Arnica for inflammation, and fresh vegetables (carrots, celery and apples).

Flower Essences and the Protocol

A blend of Cherry Plum, Clematis, Impatiens, Rock Rose, and Star of Bethlehem preserved in Brandy is given at the rate of 5 drops twice a day on feed or misted over the horse's head for depression and lethargy. Owners are advised to take three drops of this mixture too as most of them are near exhaustion under the strain of balancing the horse's 24/7 nursing needs with the demands of their families.

Additional Therapies

One horse required intravenous saline solution administered by a veterinarian, and two aged horses improved after red and infrared lights were used two days in succession to improve energy flow.

Preventatives

In the height of the 2001 WNV epidemic in

Florida, Fort Dodge Animal Health released a WNV vaccine on an emergency, conditional basis. The vaccine was tested in 649 horses of many breeds, ages and sizes in five states. It was shown to be 96.28% free of local or systemic reactions.

Veterinarians in north Florida were given the majority of the vaccine in 2001, as that was where the most cases occurred. Horse owners lined up to get their horses vaccinated and boosters were given three weeks later. Instructions with the vaccine advised annual vaccinations, however the state veterinarian in Florida this year is advising vaccinations every four months. I have even heard anecdotal stories of horse owners having their horses vaccinated every month for WNV. A veterinarian must administer the WNV vaccination and all adverse reactions need to be reported to the company. Reportedly, Fort Dodge has received reports of very few minor reactions.

The challenge studies Fort Dodge submitted to the Food and Drug Administration (FDA) have been accepted and Fort Dodge is now awaiting the results of the potency and concentration studies submitted to FDA. Full approval is expected by the end of 2002.

The American Veterinary Medical Association advises against vaccinating unhealthy horses, and many of the horses that are vaccinated most likely have already contracted WNV. Some owners reported that their horses became WNV symptomatic within 24 hours after receiving the first WNV shot. Anecdotal reports include side effects experienced from the WNV vaccine, but it is not known whether these were reported to Fort Dodge. However, side effects in a certain percentage of the horse population are not uncommon with any vaccine.

Holistic horse owners in Florida are using the West Nile Virus nosodes developed by holistic veterinarians. After the initial dose of fifteen nosodes per day for three days, one dose a week for three weeks, then 15 nosodes are given once a month forever. No side effects have been reported in horses on the nosodes, but one horse did contract WNV while on the nosodes in 2001.

A good immune system is the best preventative.

Recommendations

Boosting the immune system during WNV season with Ester C or other nutritional or essential oil immune boosters is recommended. Reducing stress is also recommended as horses under stress from travel, performance, and foaling, or other illnesses are most susceptible.

Cautions

It is extremely important for owners not to panic. Many horror stories of death and injury have been recounted due to panic over the horse's situation. While it is commonly thought that if the horse goes down that death is highly likely, that has been the exception rather than the rule. While some horses have died within hours of exhibiting symptoms of the disease, many more have been

down for days and weeks and still recovered completely. Owners should continue their nursing care even when the horse is down and maintain a positive attitude about the recovery. Attention should be paid to the slightest changes in symptoms or behavior in order to know when to step up treatment or back off.

Long Term Effects

Now a year later, as we observe the horses who were treated with DMSO and Butazolidin, some horse owners are reporting that their surviving horses continue to lose weight despite changes in feed and dental care. This could mean that these horses have liver toxicity or ulcers.

These owners might now want to consider essential oil Raindrop Therapy and other detoxifying modalities to bring their horses back into good health.

Alternatively, horses treated with the protocol described in this paper have recovered fully and are in good health, with the exceptions cited earlier.

Conclusion

The protocol provides an alternative way to help horses recover from WNV at minimal cost to the owner. Reportedly, the sooner the protocol is initiated, the shorter the duration and less severity of the illness. The protocol is effective, inexpensive, and can be performed by a horse owner with minimal coaching. Except for WNV nosodes, the remedies can be readily obtained. In my opinion, many more horses could be saved through use of this protocol.

Sources and Resources:

- Florida Department of Agriculture and Consumer Services, <http://doacs.state.fl.us/~aes/westnile2001/WestNile.htm>
- Florida Department of Health, www.doh.state.fl.us
- University of Florida, <http://fmel.ifas.ufl.edu/online/wnile/WstNile.htm>
- Florida West Nile Virus Hotline 1-800-871-9703
- U.S. Centers for Disease Control and Prevention
- United States Department of Agriculture, www.aphis.usda.gov/oa/wnv/wnvstats.html
- Fort Dodge Animal Health, www.wyeth.com/divisions/fort_dodge.asp

The cases discussed were not scientifically controlled experiments and this paper has not been peer reviewed. Updated 11/2/02.

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Nancy's WNV Protocol chart and Raindrop Therapy instructions are now available from The Horse's Hoof. For more information, visit <http://www.thehorseshoof.com/westnilesupport.html>