

Advanced Equine Reproduction Course

By

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Equine viral arteritis is considered an economic disease. It can cause a vasculitis throughout a horse, resulting in edema and hemorrhage, respiratory disease and associated clinical signs. Abortion also occurs and is thought to be due to a myometritis and/or a reduction of fetal blood flow. Stallions that are infected may become long term carriers of the virus which can result in the possibility of spreading the virus to seronegative mares and perpetuating the disease.

The question was on equine viral arteritis and breeding. The modified live vaccine that is available is designed to be given within three weeks before breeding to a stallion shedding the virus. It is meant as protection for the mare from the infected stallion. The vaccine can induce mild clinical signs in the mare and the vaccinated mares should be isolated from any seronegative horses for three weeks. Also, seropositive mares bred to affected stallions should be kept from seronegative mares for three weeks. The virus survives the cooling and freezing process so these methods of insemination will not prevent the transmission of the virus to the mare and should not be used in seronegative mares.

A study done in Japan was done to evaluate if an intrauterine infection of EVA could be caused in mares vaccinated with the killed virus. In the group of mares that were not vaccinated 11 of 15 showed clinical signs. The four mares that were vaccinated previously with the killed virus showed no clinical signs. The virus isolation and serologic titers varied within each group and it was noted in the study that a larger group of test horses were needed. There is a possibility that vaccination with the killed virus could help prevent the spread of the virus. Field proof however is still lacking and the killed vaccine has limited availability.

The three week post vaccination isolation is necessary to control this disease. EVA is thought to be a disease that will be more prevalent in the near future if controlling measures are not followed. Until a proven vaccine can be available isolation of affected stallions, controlled breeding programs and vaccination of seropositive animals are the only effective means of controlling the disease. In regards to the owner with the mare wanting to breed her on a foal heat and wanting to vaccinate her; If the mare is seropositive there is no problem in breeding her to a seropositive stallion, so that should be determined. If she is seronegative I would recommend to vaccinate her after foaling and breed her on the next heat cycle, after 21 days have passed. Then next year if she still has a strong titer to EVA and the owner is informed of the risks she may be able to be bred on the foal heat. The owner also needs to be informed that his mare will be seropositive from then on and will limit where she can be shipped.

References

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