

EPM in Horses

Equine Protozoal Myeloencephalitis (EPM) continues to plague horses and remains very illusive to both owners and veterinarians. The infection occurs with one of two parasites, either *Sarcocystis neurona* or *Neospora Hughesi*. Many horses, up to 85%, will have antibodies against these parasites indicating that they have been exposed to the parasite but do not have a current infection. The immune system is capable of fighting off the parasite without evidence of an active infection.

Horses become infected most commonly by ingesting opossum feces containing the parasite. The parasite then migrates through the horse's body before taking up residence in the central nervous system (CNS). The parasite can land in different parts of the CNS causing clinical symptoms to show up completely different in each horse.

The vast and varied clinical symptoms of EPM include the following: incoordination, weakness, muscle atrophy, decreased reflexes, depression, head tilt, facial nerve paralysis, difficulty swallowing, upper airway dysfunction, and seizures, to name a few but not all. These symptoms can mimic many other diseases which makes it extremely difficult to diagnose. Testing methods are getting better but the only definitive diagnosis is by visualizing the parasite within the tissues of the CNS, which can only be achieved through necropsy.

Horses presumptively diagnosed with EPM may be treated with one of three FDA-approved medications, as well as, other compounded medications. Other anti-inflammatory medications such as flunixin meglumine and DMSO are used as well. Experts recommend also treating with 5000 to 10000 IU of Vitamin E per day. Treated horses may never recover completely from the damage that was caused by the parasite, so early diagnosis is key in recovery.

If you feel like your horse may be exhibiting any of the signs above, make an appointment with your veterinarian to discuss probable diagnosis and best treatment plan.