The "Dummy Foal"

"Dummy" foals are a potential problem faced by breeders during foaling season. Numerous terms have been used to describe this syndrome including barkers, wanderers, or convulsants. Veterinary terminology includes neonatal maladjustment syndrome, perinatal asphyxia syndrome, and most commonly hypoxic ischemic encephalopathy (HIE). These terms are used to describe newborn foals that have behavioral or neurologic abnormalities that do not have an infectious, toxic, congenital or metabolic cause. The condition results from decreased blood and oxygen supply to the brain.

History:

Foals diagnosed with HIE often have a history of the mare experiencing difficulties during the pregnancy or during delivery of the foal. Premature lactation, uterine or placental infection, and prolonged or shortened pregnancy lengths may play a role. In addition, problems during delivery, such as dystocia or premature placental separation ("red bag") increase the risk of a foal developing HIE. It is important to note, however, that some cases of HIE foals have no known predisposing factor.

Clinical Signs:

Clinical signs are very variable in onset, severity and duration. Some foals begin showing clinical signs immediately after birth while others may not show any signs for a couple of days. Mild signs can include poor suckle response, lack of interest in the mare, wandering, depression or staring into space. Facial spasms, lip curling or abnormal vocalization ("barking") may be observed. Clinical signs may also be much more severe including seizures, unresponsiveness, and blindness.

Diagnosis:

Diagnosis of an HIE foal is based on clinical signs, history and eliminating other potential causes. It is important to have your veterinarian evaluate the foal to rule out other potential causes, including septicemia and failure of passive transfer, as these conditions are treated differently.

Treatment:

The amount and level of treatment is dependent of the severity of the foal's clinical signs. In mild cases, very little treatment may be necessary. If the foal fails to absorb adequate colostrum and has failure of passive transfer in addition to HIE, plasma will be given. If the foal is unable to nurse, feeding through a nasogastric tube or supplementation given intravenously may be needed. In severe cases, more aggressive therapy is required. Seizure activity needs to be controlled. Medications, such as DMSO, mannitol, and magnesium sulfate, can be given to reduce cerebral edema and limit damage to cells. Caffeine may be administered to support respiratory function or mechanical ventilation may be needed. Broad spectrum antibiotics are started to decrease the risk of a secondary infection or sepsis. Thiamine is helpful in supporting the metabolic processes of cells. Anti-ulcer medications are given to prevent additional gastrointestinal problems. Vitamin E and Selenium are often added to reduce oxidative damage.

Prognosis:

The prognosis for survival is dependent of the amount of cellular damage the foal has experienced. The prognosis is worse for foals that develop seizures. Recovery is not always possible. If clinical signs can be controlled and adequate care can be given, recovery can occur with no long-term effects.

Please contact your veterinarian or any of the veterinarians at New England Equine Medical & Surgical Center if you have any questions.

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