EQUINE REPRODUCTION

Ophthalmic and corneal curvature in Quarter horses with hereditary equine regional dermal asthenia

On the topic of breed

Researchers believe that an immune-mediated uveitis attacks the iris' melanin pigment, causing the dilated pupil to appear more white and noticeable. About 50% of the horses had retained vision on short follow-up. The researchers reported that the best treatment was a combination of topical and/or steroidal anti-inflammatory drug (NSAID). Clark reported that treatment is long term and likely will not have a good outcome. The average onset is 11 years of age. In light of the fact that most of the patients do involve both eyes. Half the cases go on to perforate, but if treated surgically they have a good outcome. The fungal plaque form of equine keratomycosis, researchers saw fungal hyphae in 100% of the samples when viewed under the microscope; when they cultured the samples, only 60% grew fungi, indicating that corneal cytology was more sensitive than culture in diagnosing the condition, Clark said.

Researchers examined the diagnostic utility of corneal cytology vs. culture in horses with keratomycosis. Fungal hyphae were identified microscopically in 40% of the corneal scrapings, but fungi were cultured from only 5% of the samples. The researchers recommended cytology as the diagnostic test of choice in keratomycosis. Keratomycosis is a fungal infection of the cornea, the transparent outer coat of the eye. Fungi are commonly found on the skin, but should not be present on a corneal culture.

In the first paper Clark discussed, researchers looked at 22 cases of keratomycosis (fungal infection of the cornea). Sixty-five percent of the horses had been exposed to dirt or water. The horses were treated with topical antifungal and ophthalmic medication. They also treated all the horses for secondary uveitis (inflammation of pupillary structures behind the cornea). The researchers are unsure of the cause of the fungal infection. Approximately 16 horses underwent a keratectomy (trimming away the plaque where the corneal tissue was undermined). This surgical approach promoted blood vessel migration into the defect and epithelial cell growth to repair damaged corneal tissue. A small corneal scar remained in many cases. Treatment took, on average, 6½ weeks, and it took eight weeks for 73% of the cases to regain vision. Clark said this study's take home message is that cytology (examination of a cellular swab) is important for making accurate diagnoses of eye infections in order to implement appropriate treatment.

In a retrospective study researchers examined 21 affected eyes in horses nearsighted. Curvature and diameter. These characteristics compromise distance vision by making affected horses nearsighted. The researchers evaluated 12 horses. On average, the horses were 12 years old, and the disease onset was 8–9 years of age as compared to 2 years old in light of the fact that most of the patients are males, researchers suspect a chromosome X-linked inheritance pattern.

A retrospective study also examined 12 cases of limbal squamous cell carcinoma earlier than horses of other breeds. Haflinger horses tend to develop limbal (on the border of the cornea and the white of the eye) squamous cell carcinoma. The form of this cancer is more sensitive to chemotherapy than squamous cell carcinoma of the skin. Most tumors presented to the University of Florida Veterinary Medical Center from 2001 to 2013. In a healthy eye, fungus shouldn't be present on a corneal scraping. Researchers saw fungal hyphae in 100% of the samples when viewed under the microscope; when they cultured the samples, only 60% grew fungi, indicating that corneal cytology was more sensitive than culture in diagnosing fungal keratomycosis, researchers saw fungal hyphae in 100% of the samples when viewed under the microscope; when they cultured the samples, only 60% grew fungi, indicating that corneal cytology was more sensitive than culture in diagnosing fungal keratomycosis.

The next paper Clark reviewed concerned a newly recognized ocular inflammatory disease called heterochromic iridocyclitis with secondary keratitis in adult horses. Researchers published the results of a study to assess the potential for keratitis to occur in adults. The researchers also performed an immunohistochemical characterization of a novel equine ocular disorder: heterochromic iridocyclitis with secondary keratitis in adult horses. The study also characterized the antigenic properties of a novel equine ocular disorder: heterochromic iridocyclitis with secondary keratitis in adult horses. The researchers reported that the best treatment was a combination of topical and/or steroidal anti-inflammatory drug (NSAID). Clark reported that treatment is long term and likely will not have a good outcome. The average onset is 11 years of age. In light of the fact that most of the patients do involve both eyes. Half the cases go on to perforate, but if treated surgically they have a good outcome. The fungal plaque form of equine keratomycosis, researchers saw fungal hyphae in 100% of the samples when viewed under the microscope; when they cultured the samples, only 60% grew fungi, indicating that corneal cytology was more sensitive than culture in diagnosing the condition, Clark said.