Researchers Compare Similar Equine Eye Conditions

Equine corneal degeneration (CD) and calcific band keratopathy (CBK) are relatively similar conditions affecting the horse’s eyes. In both conditions, minerals and/or lipids (fats) are deposited on the cornea, potentially resulting in painful corneal ulceration.

Researchers recently took a closer look at the two conditions to compare their similarities and differences. They ultimately determined that the two ailments, despite some differences, are relatively similar and could represent a continuum of disease severity.

In the study, the team evaluated the medical records of horses diagnosed with CD or CBK at the University of California (UC), Davis, Veterinary Medical Teaching Hospital. One key finding was that horses diagnosed with CD or CBK were significantly older than the general hospital population, with a median age of 16 or 18 years, respectively.

“Older horses tend to have more trouble healing their corneas, and corneal sensitivity declines with age,” said study author Sara M. Thomasy, DVM, PhD, Dipl. ACVO, associate professor of comparative ophthalmology at UC Davis’ School of Veterinary Medicine.

The team also determined that horses previously diagnosed with equine recurrent uveitis are at a greater risk of also developing CD and/or CBK. “However,” Thomasy noted, “we do not know whether equine recurrent uveitis causes corneal degeneration or CBK, or if it is a result of the topical corticosteroid administration that is a common treatment for equine recurrent uveitis.”

Further, the researchers determined that horses with pituitary pars intermedia dysfunction (PPID, or equine Cushing’s disease) might also be at a greater risk of developing corneal diseases, including CBK. “It is possible that this factor or other changes that horses experience as a result of PPID predisposes them to develop CBK,” she relayed. “It may also be an association because both PPID and CBK are found more often in older horses.”

All equine eye diseases or ailments are managed most easily if detected early. As such, Thomasy encouraged horse owners to monitor their horse’s eyes closely for problems and to call their veterinarian if their horse is squinting or has redness, discharge, or cloudiness in his eye.

She also recommended that veterinarians include ocular exams as part of their regular physical exams. “When the horses receive their annual vaccines is an optimal time for an eye exam,” she said.

The study, “Comparison of corneal degeneration and calcific band keratopathy from 2000 to 2013 in 69 horses,” will appear in an upcoming issue of Veterinary Ophthalmology.