The school’s teaching hospital recently acquired equipment that has increased its service offerings for equine ophthalmology patients. The semiconductor diode laser device allows ophthalmologists to perform new treatments on horses’ eyes, including cyst removal and a glaucoma treatment. These procedures have been successful for many years in human and veterinary medicine, and now are available at the school for the first time.

Horses can develop cysts from their iris for no known reason. If left untreated, these cysts can grow and may cause irritation to the horse or become visually obstructive. Horses are also known to become “spooked” by seeing the cyst in their field of vision. Removal of them is now a one-time, outpatient procedure. The laser simply “zaps” the cyst multiple times until it creates a hole causing the cyst to rupture and deflate. After care is generally a short course of topical anti-inflammatory ointment for no more than a week.

More importantly for horses, the laser can also be used to treat glaucoma, an increase in pressure inside of the eye. This pressure, if left untreated, eventually destroys the retina and optic nerve, and ultimately causes blindness. Glaucoma occurs due to an inability for fluid to drain from inside the eye, most commonly secondary to chronic intraocular inflammation known as equine recurrent uveitis (ERU) or “moon blindness.” ERU is a disease that is very prevalent in horses.

The laser treatment for glaucoma is known as transscleral cyclophotocoagulation (TSCP), and destroys part of the ciliary body which produces the fluid that fills the eye, contributing to the increased pressure. TSCP treatment destroys just enough of the ciliary body to lower the production of aqueous fluid to a point that reduces the intraocular pressure, but not enough to completely stop the production, which the eye needs to remain healthy.

The hospital has performed a handful of laser treatments to date, and is already seeing positive results. The laser can also be used to prevent retinal detachments from worsening. While this condition is very rarely seen in horses, ophthalmologists use the laser to treat other animals with these retinal conditions.

These newer treatments are a preview of the launch of a full-time Equine Ophthalmology Service, slated to begin soon with the addition of Mary Lassaline, one of the nation’s leading equine ophthalmology specialists.