Equine ophthalmic emergencies may include penetrating and non-penetrating corneal trauma, collagenase ulcers, deep ulcers and descemetoceles, hyphema, eyelid and orbital trauma, severe acute uveitis and glaucoma. As with all ophthalmic emergencies and complete ophthalmic examination of both eyes is indicated. This includes evaluation of pupillary light reflexes (direct and consensual), menace response, pupil size and symmetry and intraocular examination of the anterior and posterior segment. Additional tests may include fluorescein stain, corneal cytology and culture, intraocular pressure, ocular ultrasound and other imaging techniques. With most equine ocular emergencies trauma and inflammation are a major component resulting in pain, swelling and uveitis. Treatment with a systemic NSAID such as flunixin meglumine is generally indicated. Most acute ocular trauma in the horse is blunt force in nature resulting in fractures (evaluate for sinus involvement), eyelid lacerations and explosive rupture of the globe. Consider that globe ruptures may be multiple or not externally visible and an ocular ultrasound should be part of a complete examination if all intraocular structures are not visible. Given the equine cornea susceptibility to bacterial and fungal infection, topical corticosteroids are generally avoided. Corneal ulcers should be evaluated for microbial agents and inflammatory cells using cytology and culture (bacterial and fungal). Antimicrobial therapy should be selected based on history, prior therapy, etiology, culture, cytology and whether the cornea is ulcerated or not. In general, a broad-spectrum bactericidal antibiotic is preferred. Topical fluoroquinolones are capable for achieving therapeutic levels through an intact corneal epithelium. If antifungals are indicated, topical voriconazole is the most efficacious.

If surgery is indicated it may be performed using sedation combined with retrobulbar, supraorbital and auriculopalpebral nerve blocks or general anesthesia. In general, magnification should be used for all ophthalmic surgery regardless of species. In addition, just because the horse is a larger animal, does not mean it requires larger suture for eyelid and corneal repair.