

VETERINARY VISION NEWSLETTER

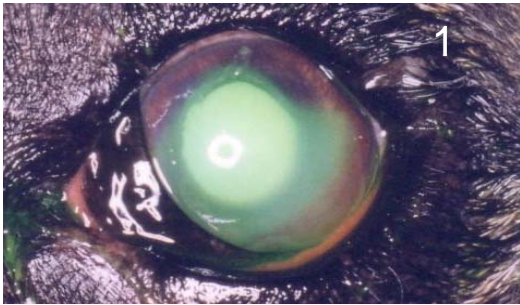
July 2009
Volume 1 - Issue 3



Veterinary Vision of Rochester • 265 East Second Street • Rochester, MI 48307 • www.vet-vision.com • ebinger@vet-vision.com • 248.402.9844

What's your Diagnosis?

The key to finding a diagnosis and treatment plan is a thorough examination and history. It is important to have a mental protocol for performing an ophtho exam. We start our ophthalmic examination with the adnexa and work our way from anterior to posterior into the globe including: lids, conjunctiva, sclera, cornea, anterior chamber, iris (including PLR's), lens and fundus. Abnormalities are noted and together with the history make the basis of the diagnosis or plan for further diagnostics and treatment.



Q. Lady, a 12yr old FS lab mix with a one week history of blepharospasm OS. On examination all reflexes were present and normal. The STT OD was 25mm/min, OS 20mm/min. IOP OD was 13mmHg, OS10mmHg. A moderate episcleritis was noted OS. She was fluorescein stain positive OS and negative OD. She exhibited corneal epithelial lipping around the fluorescein stain positive area. All other ophthalmic examination findings were unremarkable.

A. Lady was diagnosed with a geographic indolent ulcer OS. Proparacaine Hydrochloride 0.5% ophthalmic solution was instilled OS for topical anesthesia. Sterile cotton-tip applicators were used to gently debride the abnormal epithelium. Dilute betadine in saline was used to cauterize the cornea and a grid keratotomy was performed over the ulcer using a 25 gauge needle. Atropine Sulfate 1% ophthalmic drops were applied once to treat the anterior uveitis. She was fitted for an Elizabethan collar during the exam and was sent home on Tobramycin 0.3% ophthalmic drops and Muro 128 5% (Sodium Chloride) Ointment QID/OS. The ulcer was healed at a recheck appointment one week later. She was placed on topical TobraDex ophthalmic drops 3 times daily to minimize scarring. At her final recheck 3 weeks following initial presentation, minimal scarring was present OS.



Q. Abbey a 12 yr old FS terrier mix, presented with a one week history of a cloudy left eye. On examination, direct PLR, menace and dazzle were positive OD however, the indirect PLR was negative. Direct PLR was negative, indirect PLR, menace and dazzle were positive OS. STTs were 20mm/min OU. IOP OD 16mmHg, OS 55mmHg. Mild episcleritis was noted OS. The fundic exam was normal OU.

Aphakic Crescent

A. Abbey was diagnosed with anterior lens subluxation and cortical immature cataract with secondary glaucoma OS. The key to this case is to look at the lateral edge of the lens; you can see an 'aphakic crescent.' This is an area where the zonules that support the lens have ruptured and the lens has shifted medially and anteriorly. In this area you can actually see to the posterior segment around the malpositioned lens. A lensectomy was performed later that day. An Elizabethan collar was placed following surgery. She was hospitalized overnight and treated with Demecarium Bromide 0.125% BID/OS to constrict her pupil, Neo-Poly-Dex QID/OS, oral antibiotics and Rimadyl. Her IOP remained within normal limits throughout the night and she was sent home on the medications listed above. At her recheck the following week she was visual OU with a mild amount of inflammation present OS. At her rechecks she continued to do well and still remains visual. She will be maintained on Demecarium Bromide BID/OS indefinitely to keep her pupil constricted to minimize risk of vitreal prolapse.



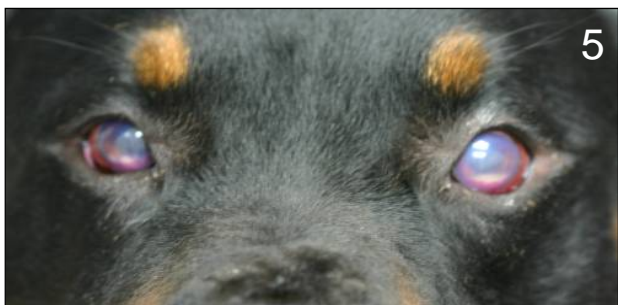
Q. Zoey, a 2 yr old FS Yorkshire Terrier mix presented with a history of her eyes going white 2 days ago along with acute onset of blindness. On exam, she had no menace or dazzle reflexes OU. We were unable to evaluate her PLRs due to anterior segment changes. Her STTs were OD 21 mm/min and STT OS 22 mm/min, her IOPs were OD 10 mm Hg and IOP OS 11 mm Hg. Her scleras were moderately inflamed. Her anterior chambers were filled with homogenous white infiltrate. We were unable to visualize her lens or fundus OU. She was not PU/PD and had been acting normal until she went blind.

A. Zoey was diagnosed with lipid laden aqueous. Blood was collected for a CBC and serum chemistry. The serum was significantly lipemic (hyperlipidemia). Her chemistry revealed normal Cholesterol but her Triglycerides were 4509mg/dl (20-150) all other values were normal. The uveitis, assumed to be secondary to hyperlipidemia in this case, compromised the blood aqueous barrier which allowed the development of lipid laden aqueous. She was started on oral prednisolone 0.5mg/kg PO BID and prednisolone acetate 1% ophthalmic drops QID/OU. She was placed on a low fat diet. At her recheck 2 weeks later she was visual with normal anterior chambers OU and her serum chemistry values were normal.



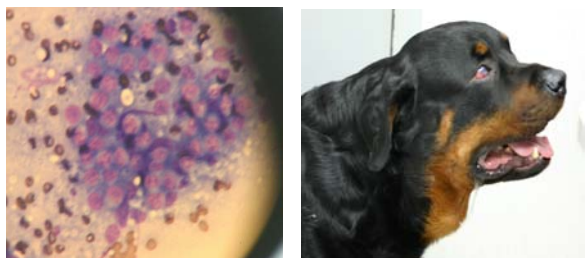
Q. Cleo, a 9 yr F DSH, presented for a gray eye. She had multiple congenital abnormalities. On examination all reflexes were present OU. IOP OD 16mmHg, OS 13mmHg. Moderate episcleritis OD and slight episcleritis OS. Iris precipitates on the anterior lens capsule were noted OD along with anterior uveitis and granulosomatous fibrin formation. Anterior uveitis was noted OS with granulosomatous fibrin formation. T = 102.7 and TP was 10gm/dl.

A. Cleo was diagnosed with an active corona virus infection, likely to be FIP. Cleo was tested for FeLV/FIV in house and was negative for both. A CBC, serum chemistry as well as feline corona virus (FIP) titers were sent out for analysis. The feline corona virus titer came back as a strong positive. She was treated with an intramuscular injection of 2mg of Triamcinolone Acetonide and Prednisolone Acetate 1% ophthalmic drops QID/OU. Supportive and symptomatic treatment was recommended for FIP along with abdominal ultrasound. She improved significantly over the following three weeks. Her uveitis is currently controlled with Prednisolone Acetate 1% ophthalmic drops TID/OU. Other diagnostics that should be considered in cases of feline uveitis include a full ophthalmic examination, an ultrasound to rule out neoplasia, toxoplasmosis and Bartonella titers.



Q. Max, a 5yr old MN Rottweiler, presented with a recent visual deficit. His appetite had slowly been decreasing and he was becoming more lethargic. On examination, menace and dazzle reflexes were present OU however he failed to see cotton ball drops and was unable to maneuver a photoic maze. STT OD was 24mm/min and OS 26mm/min. IOP were OD 27mmHg and OS 24mmHg. Moderate episcleritis, diffuse corneal edema and severe uveitis with 3+ aqeual flare and anterior chamber cellular infiltrate were noted OU. T=103.5 He had generalized lymphadenopathy. A fine needle aspirate was taken from the left submandibular lymph node (cytology right).

A. The results of Max's FNA were consistent with lymphoma. Consultation with an oncologist was recommended and chemotherapy options given to the owner. Other diagnostics recommended included CBC, serum chemistry, urinalysis, chest radiographs, abdominal ultrasound and lymph node biopsy. The family elected for conservative treatment and took Max home on oral prednisolone, topical 2% Dorzolamide BID/OU and 1% Prednisolone Acetate drops QID/OU. Two days following the appointment Max was visual and acting more normal. He continued to do well for the next 6 weeks, and then started to relapse. He was euthanized 8 weeks following his diagnosis.





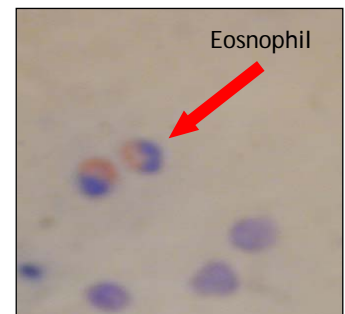
Q. Karl, a 5 yr old MN Persian, presented with a one month history of a black spot on his left eye. The owner had been using Tobramycin drops intermittently but has not noticed any improvement. Karl has always had a lot of tearing from his eyes, but has never had an upper respiratory infection, he was acquired from a breeder as a kitten. On ophthalmic examination mild blepharospasm and epiphora. was noted OS with tear staining present OU. Slight medial/interior entropion was noted OU. A paracentral, dark brown, necrotizing lesion was noted in the cornea with deep and superficial neovascularization to the lesion and slight diffuse corneal edema. There was fluorescein stain uptake along the dorsal aspect of the lesion. The anterior segment and fundus examination were normal OU.

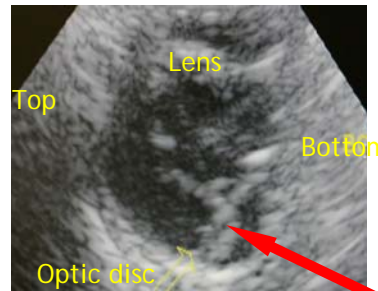
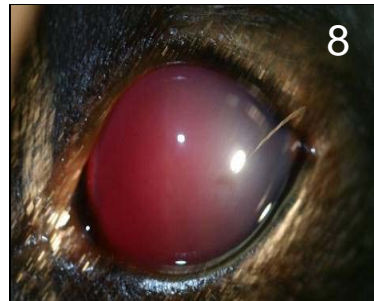
A. Karl was diagnosed with a corneal sequestrum. Due to his history of chronic epiphora OU and URI a conjunctival swab for PCR of Feline Herpes Virus was submitted. Karl was scheduled for keratectomy later that week. The sequestrum was successfully removed via lamellar keratectomy and a soft contact lens was placed over the cornea and a temporary tarsorrhaphy suture was placed to hold the contact in place. He was treated with Tobramycin 0.3% ophthalmic drops QID/OS, Idoxuridine 0.1% QID/OS, and Muro 128 5% (Sodium Chloride) ointment QID/OS. He was positive for feline herpes virus and was started on oral L-lysine BID. The keratectomy site was healed at his one week recheck and his ocular discharge had improved significantly. He is currently being maintained on oral L-lysine SID.



Q. Fluffy, a 7 yr old MN DLH, presented with a one month history of a cloudy left eye. He was prescribed Neo-Poly-Dex TID which seemed to help. Since stopping the Neo-Poly-Dex, the eye seemed to be getting worse. On examination, reflexes, STT, IOP and fundic exam were normal OU. A mild conjunctivitis and episcleritis were noted OS with deep neovascularization around the lateral/limbal border of the cornea. There were multiple areas of fluorescein stain uptake amongst areas of white plaque on the cornea. A cytology of corneal cells was taken (At right).

A. Fluffy's ophthalmic exam and cytology findings were consistent with eosinophilic proliferative keratoconjunctivitis. A conjunctival swab was taken for cytology and revealed numerous eosinophils along with normal epithelial cells. A CBC and serum chemistry was submitted and results were within normal limits. He was started on oral Megestrol Acetate (Ovaban) one 5mg tablet PO on days 1,3,5,7,10 and 14, then as directed and Prednisolone Acetate 1% ophthalmic drops TID/OS. At the recheck two weeks later the ulcer OS was healed and his Megestrol Acetate was decreased to one 5mg tablet once a week until his one month recheck. At that point the keratitis was resolved and he was maintained on Megestrol Acetate 5mg tablet once weekly for a second month, then once every 2 weeks for 2 months. He is currently maintained on 5mg Megestrol Acetate once a month. He continues to have blood work and physical exams every six months to monitor for relapses. Megestrol Acetate has a potential to produce diabetes in cats; however being maintained on the dose discussed has never produced this condition in our practice.





Retinal detachment

Q. Cody, a 4 yr old ML Border Collie, presented with red eyes. The owners had rescued him 3 weeks prior to the appointment and he was already blind at that point. The RDVM had recently diagnosed glaucoma and cataracts. On examination, no reflexes were present OU. STT OS 23mm/min, OD 25mm/min. IOP OS 35mm Hg and 25mm Hg OD. Moderate episcleritis Moderate episcleritis and mature cataract were noted OD. Severe hyphema was noted OS. The fundic exam was not able to be performed in either eye due to anterior segment and lenticular changes. An ocular ultrasound was performed.

A. Cody's ophthalmic ultrasound confirmed retinal detachment OS and he was diagnosed with mild phacolytic uveitis OD. Rule outs for hyphema include retinal detachment, clotting disorder, thrombocytopenia, intraocular neoplasm, severe anterior uveitis and uveal trauma. A thorough physical exam to check for petechiation, complete blood count, serum chemistry, coagulation profile (APTT, PT, Fibrinogen, FSP, and platelet count) and blood pressure analysis are also recommended in cases of hyphema. Cody's retinal detachment and hyphema OS were determined to be secondary to chronic glaucoma. It was presumed that the glaucoma OS developed secondary to chronic phacolytic uveitis. He was placed on topical Dorzolamide 2% TID/OS, Timolol Maleate 0.5% BID/OS, Prednisolone Acetate 1% QID/OU, and Prednisolone 0.5mg/kg PO BID. Cody responded to the medication initially but developed glaucoma OD 2 weeks later. The owner elected to have an evisceration performed OU to permanently control the IOP's and maintain a normal appearance. Cody is currently doing well was off all topical and oral medications one month following evisceration OU.