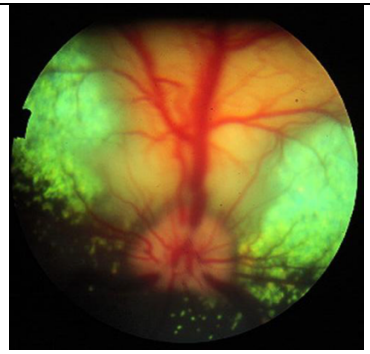
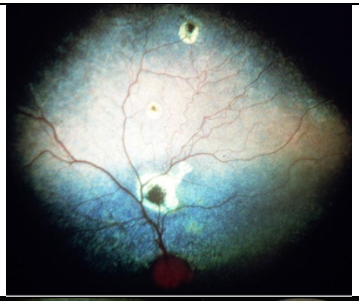
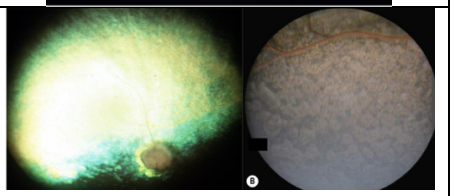
Diseases of the Fundus

Disease	Clinical Signs and Causes	Diagnosis	Treatment	Picture
Chorioretinitis ***Active**	Analogous to anterior uveitis Fundus findings: Cellular infiltrates Hyporeflexive areas, indistinct borders, retinal separation/detachment, hemorrhage <u>Causes</u> Infectious, Systemic Hypertension, Autoimmune dz, Neoplasia, Coagulopathies	Signs of systemic disease CBC/Chem Fungal titers Special tests (FeLV, etc.) CSF Taps Imaging techniques	Systemic Depends on cause	
Chorioretinitis ***Chronic**	Post-inflammatory scar Retinal thinning Hyperreflective areas Hyperpigmented Well-distinct border	Clinical Signs		
Progressive Retinal Atrophy	Inherited bilateral retinal photoreceptor degeneration Breed predisposition: Cocker spaniels, poodles, labradors, etc. Variable age of onset Night blindness to total blindness Reduced to absent PLRs Diffuse hyperreflectivity Retinal vessel attenuation Optic nerve atrophy Depigmentation (non-tapetum) Cataracts formation (Secondary)	Signalment History Clinical signs Electroretinogram	None as of now ☹	

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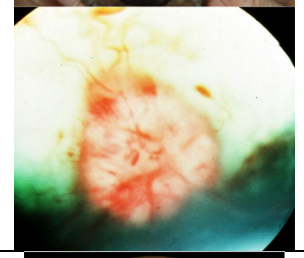
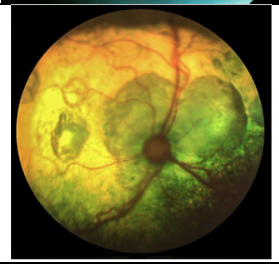
Sudden Acquired Retinal Degeneration Syndrome (SARDS)	Sudden acute onset of complete vision loss Middle-aged dogs Females are overrepresented Poodles, dachshunds, mixed breeds (any breed) May have systemic clinical signs similar to Cushing's (PU/PD/PP) Retinal initially normal in appearance	History Normal fundus Electroretinogram is flat Rule out optic neuritis and brain disease	None	
Optic Neuritis	Inflammation of the optic nerve Unilateral or bilateral Acute blindness, Mydriatic pupil, absent PLR, Swollen/hemorrhagic optic disc (if optic disc is affected) Causes: Idiopathic, immune mediated, granulomatous meningoencephalitis, trauma, systemic infections, neoplasia	Ophthalmic and neuro exam CBC/Chem/UA Imaging techniques Titers for infectious disease CSF Tap ERG	Treat underlying cause Systemic immunosuppressive drugs if immune-mediated	 
Hypertensive Retinopathy	Primary <5% of all cases Secondary: Renal failure, hyperthyroidism, hypertrophic cardiomyopathy Clinical Signs: Acute blindness, dilated, poorly to unresponsive pupils, bullous retinal detachment +/- hemorrhage	Clinical Signs	Identify and treat underlying causes Systemic therapy for hypertension	

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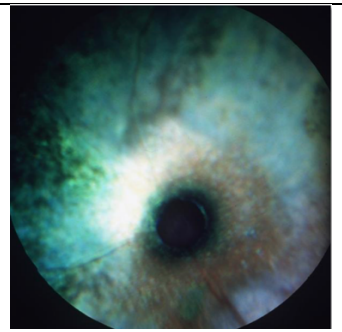
Enrofloxacin Toxicity in Cats	Dose-related retinal toxicity (no more than 5mg/kg/day) Acute blindness and mydriasis Generalized retinal degeneration Tapetal hyperreflectivity (rapid) Retinal vascular attenuation (rapid) Flat line ERG – Loss of photoreceptors	Clinical signs Hx of enrofloxacin consumption	Cessation of the drug *Some have retained vision if they had only been receiving the drug for a short period of time	
Ivermectin Toxicity in Dogs	Sudden onset of blindness Mydriasis Negative to incomplete PLRs Linear retinal edema, folds along tapetal/non-tapetal border +/- systemic signs: hypersalivation, ataxia, tremors, coma/death Cause: Exposure to high levels of ivermectin	History of acute blindness and ivermectin exposure Clinical signs Serum ivermectin levels >1,000ng/g	May not be necessary Intralipid (20% lipid emulsion) IV Prognosis: Makes complete recovery in 7-14 days, initial ERG diminished but recovers