Case 55:
SP13-5129

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Clinical History

• Koko: 9-year-old FS Dachshund
• Initial presentation for cataract evaluation
• Ophthalmic exam OU:
  – No menace/dazzle
  – Mature cataracts without capsular rupture
  – Keratic precipitates
  – 2+ flare with cells
  – Initial low IOP (4 and 5 mmHg)
  – OS developed glaucoma (34 mmHg)
• Bilateral enucleation was elected
OD:

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Diagnoses

• Morphologic Diagnoses:
  – Severe lymphoplasmacytic and granulomatous endophthalmitis
  – Marked cataractous change with lens protein leakage
  – Plasmoid vitreous and aqueous
  – Peripheral anterior synchelia
  – Broad posterior synchelia
  – Retinal detachment and segmental retinal atrophy

• Diagnosed with diabetes mellitus 6 mos prior

• Bottom Line
  – Lens induced uveitis associated with diabetic cataract
Diabetes Associated Cataract

- Hyperglycemia and increased lens glucose concentration
- Normal anaerobic metabolism by hexokinase pathways are overwhelmed
- Increased metabolism by aldose reductase
- Build up of sorbitol w/in lens
- Osmosis of fluid into lens and biochemical changes result in cataract
- Intumescence and phacolytic/phacoclastic uveitis
- Characteristic macrophage rich blanketing of uvea
Questions?