

CATARACTS AND CATARACT SURGERY:

What You and Your Clients Can Expect

Dr. Amanda Corr | Ophthalmology, VMD, DACVO

BACKGROUND

Cataracts are a leading cause of blindness in dogs. Most canine cataracts are inherited with a prevalence of over 11% in some pure breeds and an average age of onset 5-8 years of age. Up to 75% of dogs with diabetes mellitus will develop cataracts leading to significant vision loss within 9 months of the diagnosis. Vision loss can lead to significant decline in quality of life for many dogs. Additionally, without treatment, cataracts can lead to secondary ocular damage and pain due to lens-induced uveitis (LIU).

The only proven treatment for cataracts is surgery. The same technique used in people, phacoemulsification, is used in dogs. Phacoemulsification uses ultrasound energy to emulsify

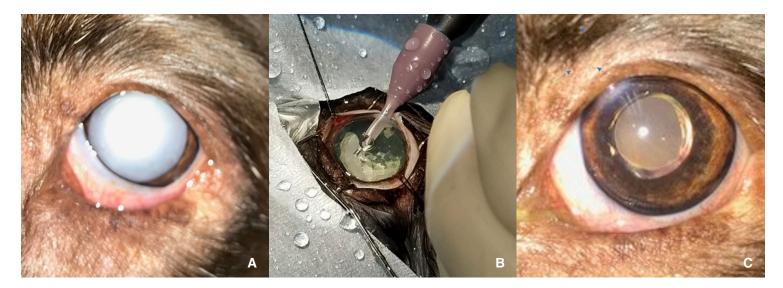
VISION LOSS CAN LEAD TO SIGNIFICANT DECLINE IN QUALITY OF LIFE FOR MANY DOGS. ADDITIONALLY, WITHOUT TREATMENT, CATARACTS CAN LEAD TO SECONDARY OCULAR DAMAGE AND PAIN DUE TO LENS-INDUCED UVEITIS (LIU). and aspirate the cataractous lens through a very small (approximately 3 mm) corneal incision. Most commonly, an artificial lens is implanted at the time of surgery. The artificial lens implants are made of inert material such as polymethylmethacrylate with a refractive power of 41 diopters. This refractive power selection is based upon average measurements of a variety of breeds. Dogs that have their cataracts removed but are not candidates for lens implants still regain significant vision but will be far-sighted.

WHEN TO REFER

Any dog diagnosed with cataracts will always be at an advantage with early referral to a veterinary ophthalmologist. Waiting for the cataracts to "mature" is not recommended. With modern technology and techniques, cataract surgery has a short-term success rate of approximately 90-95% and longterm success rate of approximately 85%. The highest rate of success occurs when cataracts are removed at the immature phase. With increasing maturity of the cataract, complications associated with lens-induced uveitis including glaucoma and retinal detachment are significantly higher.



Early referral may allow the ophthalmologist to visualize the fundus and rule-out retinal and/ or optic nerve abnormalities. At the time of initial cataract consultation, the patient is closely evaluated for any additional ocular disease such as keratoconjunctivitis sicca, uveitis, lens instability, and glaucoma. Additionally, the patient can be started on appropriate anti-inflammatory treatment to help reduce the risk for complications associated with LIU.



- A: Pre-operative photograph of mature cataract OS w/ pharmacologic dilation
- B: cof phacoemulsification needle emulsifying the lens nucleus
- C: Post-phacoemulsification with intraocular lens implant OS; blue arrows point to intraocular lens edges

PRE-OPERATIVE EVALUATION

If a patient appears to be a good candidate for cataract surgery, an ocular ultrasound and electroretinogram (ERG) will be done to evaluate the health of the retina. These tests are performed using topical anesthesia; only rarely is sedation indicated for these tests which take about 15-20 minutes. The ocular ultrasound is done to evaluate the lens capsule and posterior segment. Retinal detachments and vitreal disease may be identified during the ultrasound. Electroretinography is done to measure retinal function which may be abnormal due to inherited retinal degenerative disease or, less commonly, Sudden Acquired Retinal Degeneration Syndrome (SARDs).

If a patient is scheduled for cataract surgery, they will be prescribed preoperative eye drops and may require additional testing such a blood work and urinalysis.

SURGERY

Cataract surgery patients are admitted the morning of surgery with planned discharge that afternoon. If a patient experiences a complication, they may spend the night. Most patients are treated post-operatively with 3 topical medications (antibiotic, anti-

inflammatory, intraocular pressure reducer) and two oral medications (antibiotic, anti-inflammatory). An E-collar is worn for at least 2 weeks. Post-operative recheck exams are imperative to assess the corneal incision, inflammatory response. intraocular pressure and health of the retina. The first three post-operative rechecks occur within the first month of surgery and are included in the cost of surgery. Check-ups are typically recommended every 6 months to yearly thereafter. After cataract surgery, almost all dogs will require life-long anti-inflammatory drops to control chronic low-grade uveitis.

Studies have shown that 81% of clients were satisfied with the outcome of phacoemulsification. Of those clients that were dissatisfied, the majority had not returned for the recommended post-operative recheck exams.

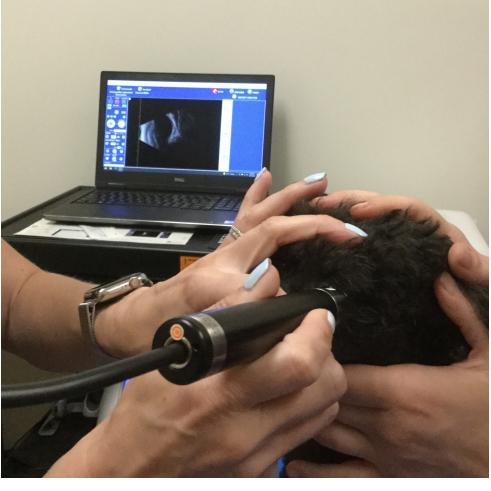
NON-SURGICAL THERAPY

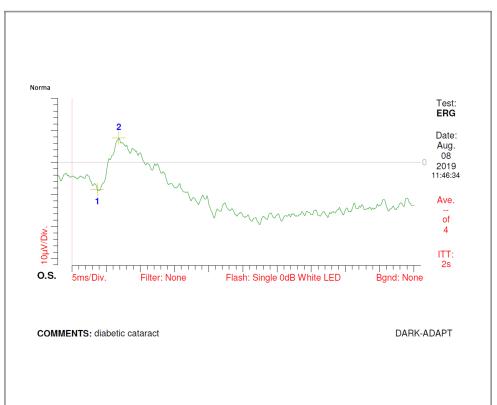
Dogs with cataracts that do not have cataract surgery will require life-long drops and monitoring due to the risks associated with LIU. Topical non-steroidal anti-inflammatory drops such as Diclofenac 0.1% ophthalmic suspension or Ketorolac 0.4-0.5% ophthalmic solution are

most commonly used. Despite appropriate treatment of cataracts with anti-inflammatories, secondary complications such as lens capsule rupture, lens subluxation or luxation, retinal detachment and glaucoma are common. Studies have shown that these complications are four times more prevalent than post-operative complications.



Patient undergoing electroretingraphy prior to cataract surgery.





Ocular ultrasound and normal electroretinogram/ERG tracing demonstrating normal retinal function.

SPECIALIZED SERVICES

BEHAVIOR

Hagar Hauser, DVM Jacqueline Wilhelmy, MS, VMD, DACVB, CCBC-KA

CARDIOLOGY

Marc Kraus, DVM, DACVIM (Cardiology)
Michael Miller, MS, VMD, ABVP
Megan Poad, VMD, DACVIM (Cardiology)
Risa Roland, DVM, DACVIM (Cardiology)

DENTISTRY

Corinne Durand, DVM

DERMATOLOGY

Katherine Backel, DVM, DACVD Karen B. Farver, DVM, DACVD

EMERGENCY AND CRITICAL CARE

James Buckman, PhD, VMD
Allison Buysse, VMD
Jason Chamberlin, VMD
Kathleen Crossman, DVM
Cierra French, DVM
Robert Gaunt, VMD
Jennifer McGough, VMD
Rachel Morgan, DVM, DACVECC
Katie Slade, VMD
Marisa Suvannavejh, VMD
Katrina Tumielewicz, DVM, DACVECC
Sarah Wilson, DVM

INTERNAL MEDICINE

John V. DeBiasio, DVM, DACVIM
James F. Dougherty, MS, VMD
Tabitha A. Hutton, DVM, MTR, DACVIM (SAIM)
Leslie A. Kuczynski, VMD, DACVIM

NEUROLOGY

Lisa Lipitz, VMD, DACVIM (Neurology)
Daniella Vansteenkiste, BVetMed

ONCOLOGY

Corinne Durand, DVM
Kendra Hearon, VMD, DACVS-SA
ACVS Fellow, Surgical Oncology
Jacqui Niles, BVETMED, SAS, DACVS
Suzanne Rau, DVM, DACVIM (Oncology)

OPHTHALMOLOGY

Amanda Corr, VMD, DACVO Chloe Spertus, DVM, DACVO

RADIOLOGY

Robert McLear, VMD, DACVR Lisa Suslak, VMD, DACVR

SURGERY

Kendra Hearon, VMD, DACVS-SA ACVS Fellow, Surgical Oncology A. Jon Nannos, DVM Jacqui Niles, BVETMED, SAS, DACVS Catherine Popovitch, DVM, DACVS, DECVS Timothy M. Schwab, VMD, DACVS-SA Rebecca Wolf, VMD, DACVS-SA

COMPASSIONATE CARE SERVICE NOW AVAILABLE AT MVA

Jennifer Durn | MSW, LSW — Compassionate Care Coordinator

For our shared clients, we're pleased to announce that the Compassionate Care Service is now available. To learn more about this service please contact Jennifer Durn at 610-666-1050, or email jdurn@metro-vet.com.

How the service could benefit our shared clients — Many individuals share a deep connection with their pets and consider them to be beloved members of the family. MVA acknowledges the remarkable relationship people share with their furry loved-ones and offers a compassionate care service for clients who are faced with challenging circumstances regarding their pets.

Some Benefits of the Compassionate **Care Service Include:**

- Offer a listening ear during moments of concern and uncertainty.
- Assist clients with processing and making difficult treatment and care decisions.
- Provide a calming presence during testing, treatment, and euthanasia.
- Support clients as they navigate end-of-life decisions.
- Serve as a liaison between the client and veterinary team.
- Help guide conversations with parents and children.
- Lend support following the loss of a pet.
- Connect clients to community resources, when necessary.

VIRTUAL SUPPORT GROUP

A resource for your clients — our pet loss support group meets once or twice a month. Meetings begin at 7:00 pm and end at 8:30 pm. It is not necessary to RSVP, although, if you would like to please contact 610-666-1050.

For questions or further information please call 610-666-1050 or e-mail us at info@metro-vet.com.



Jennifer Durn | MSW, LSW -**Compassionate Care Coordinator**

Jennifer Durn obtained a master's degree in social work from Marywood University, Scranton, Pennsylvania, in 2013. Deeply impacted by losing her own cat, Sunset, to cancer she was inspired to make a difference for other individuals. While in graduate school, she participated in internships within the fields of hospice and oncology and studied international social work in South Korea. During her second year of graduate school, Jennifer created her own internship within a small animal hospital where she supported clients and staff through emotionally challenging situations. Following graduate school, she received a postgraduate Veterinary Social Work Certificate from the University of Tennessee at Knoxville. Jennifer's undergraduate degree is in mass communication (Mansfield University, Mansfield, Pennsylvania).

Before joining Metropolitan Veterinary Associates in the Fall of 2020, Jennifer developed and guided another program for over five years within a veterinary specialty hospital to assist families during pet illness, crisis, and loss. Throughout her career in veterinary social work, she has presented programs on pet loss, caregiver stress, supporting children through pet loss, compassion fatigue, and suicide awareness and prevention. Jennifer is fortunate to share her home with two dynamic cats named Bridger and Gannett who bring great joy to her life. *















