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### Title

Blindness from damage to optic chiasm.

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*Handwritten scribbles and the number A-537.*

## Blindness from damage to optic chiasm

We recently examined four cats that had had an eye surgically removed. In all cases, the unoperated eye was normal prior to surgery. Immediately following surgery, three cats were completely blind and one cat was partially blind. In the completely blind cats, the eyes had widely dilated pupils unresponsive to light, a finding typically seen with optic nerve or chiasmatal damage. In the partially blind cat, the pupil was widely dilated and had a sluggish and incomplete pupillary light response. In this cat, the lateral visual field (medial portion of the retina) was lost and the medial visual field (lateral portion of the retina) was at least partially spared. The three totally blind cats did not regain vision.

It is our opinion that the optic chiasm of cats, being closer to the posterior aspect of the globe than in dogs, is highly susceptible to damage secondary to traction during enucleation. Apparently, the degree of traction necessary to damage the optic chiasm of cats is considerably less than in most other species. A cautionary note is included in one ophthalmology text<sup>1</sup> and in an article describing bird enucleations.<sup>2</sup> We would suggest that, during an enucleation, cats are at risk for chiasmatal damage that could result in blindness. Extreme caution should be exercised during the surgical procedure, with no

traction placed on the globe, and the optic nerve should be transected next to the sclera.

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1. Slatter D. *Fundamentals of veterinary ophthalmology*. 2nd ed. Philadelphia: WB Saunders Co, 1990; 502.
2. Murphy CJ, Brooks DE, Kern TJ, et al. Enucleations in birds of prey. *J Am Vet Med Assoc* 1983;183:1234-1237.

## Treatment of hypoadrenocorticism in dogs

I read with interest the article on desoxycorticosterone pivalate (DOCP) for treatment of hypoadrenocorticism in dogs (*JAVMA*, Feb 1, 1993, pp 392-396). As luck would have it, my first patient with hypoadrenocorticism (I am a 1991 graduate) was a 100-lb Great Dane. The diagnostic workup and original treatment went

well. After monitoring Na:K over the next few weeks, I stabilized the dosage of fludrocortisone acetate at 10 tablets every 12 hours. The dog was doing great. However, the cheapest we could get the drug was at about 40 cents/tablet. Obviously, the treatment was going to cost around \$250/mo for life. We tried adding NaCl to the diet, increasing glucocorticoid supplementation, but nothing allowed us to decrease the dosage, and therefore the cost, of the medication.

The owners were bracing for euthanasia. As much as they loved the dog, they simply could not afford the cost of the treatment. As a last resort, we opted to try the DOCP injections. We have been using a slightly higher dosage than that cited in the article (3.08 mg/kg of body weight vs 2.2 mg/kg) at the same 25-day dosing intervals. The dog is doing well; however, the cost is less than 25% of the original treatment. We are using a commercial pharmacy service to formulate

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