Long-term Clinical Outcomes in Veterinary Ophthalmic Patients with Glaucoma: 17 dogs and three cats

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Purpose: To report clinical outcomes of veterinary ophthalmic patients with glaucoma.

Materials and Methods: Medical records from Veterinary Medical Teaching Hospital of Konkuk University from 2002 to 2007 were searched to identify veterinary ophthalmic patients with glaucoma, and 17 dogs and three cats were found. Twenty six eyes (dog, n=21; cat, n=5) from 17 dogs and three cats were included. Patients follow-up was completed by only medical record.

Results: Mean (± SD) age of the dogs and cats was 63 ± 41.57 months (range, 10-144 months). Eleven dogs and one cat were males. Six dogs and two cats were females. The most prevalent breed in dogs was Shih Tzu (65%), followed by Maltese (12%), cocker spaniel (6%), and Pekignese (6%). All cats were Domestic Short Hair (100%). Mean (± SD) duration of clinical signs before the first visit was 204 ± 263.27 days (range, 2-1080 days). The most concurrent disease was cataract (25%), followed by synechiae (20%), lens luxation (20 %), corneal ulceration (15 %), retinal detachment (10 %), hyphema (5 %), and iris bombe (5 %). Of all 26 eyes, no treatment was performed in nine eyes due to refusal of owners. Enucleation was performed in three eyes without any medical treatment. Fourteen eyes were treated with topical and systemic medication. Intraocular pressure returned to normal range in 11 eyes within 6 ~ 21 days after medical treatment. Three of the 11 eyes returned to normal function in vision. Eight of the 11 eyes did not returned to normal function in vision; however, maintaining normal intraocular pressure for 6 ~ 48 months. Seven of the eight eyes had complications including hydrophthalmos (n=4), hyphema (n=2), and phthisis bulbi (n=1) during maintaining normal intraocular pressure. Three eyes of 14 eyes showed no response to medical treatment because of severe concurrent ocular diseases.

Conclusion: This study suggests that medical treatment of glaucoma was effective to maintain normal intraocular pressure in short term but ineffective in long-term. In addition, this study provides new information on prevalence, incidence, and the long-term clinical outcomes of veterinary ophthalmic patients with glaucoma in South Korea.

Keywords: long-term clinical outcomes of glaucoma, medical treatment, intraocular pressure

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