Ahmed Valve Implant Occluded by Vitreal Incarceration in a Dog

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Signalment: A 6-year-old, spayed female, American cocker spaniel was presented with acute glaucoma in right eye (OD) four weeks after Ahmed valve implantation.

Results: On ophthalmic examination, menace responses were normal in both eyes (OU). Corneal edema was, however, observed and intraocular pressure (IOP) was 41 mmHg in OD. Medical treatments for the glaucoma had been little effect on lowering IOP, thus leading to anterior chamber paracentesis. After that, the corneal edema was disappeared and tube obstruction by the prolapsed vitreous body was shown through a slit-lamp biomicroscope. Anterior vitrectomy was undertaken to remove the prolapsed vitreous body and lens subluxation was observed under a surgical microscope. IOP was maintained under 10 mmHg after the surgery. The vitreal incarceration recurred two times more, 3 and 4 months after the gonioimplantation, and they were also managed with anterior vitrectomy. Vision was maintained and IOP has been controlled under 10 mmHg on last follow-up visit.

Clinical relevance: In most of cases, tube obstruction by fibrous membrane was common complication of Ahmed valve implantation. However, in the present case, the tube obstruction was occurred by prolapsed vitreous body and it was treated with anterior vitrectomy. This is the first case report about vitreal incarceration after Ahmed valve implantation in dogs.

Key words: Ahmed valve, tube obstruction, vitreal incarceration, dog

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