A CASE OF OCULAR ADENOCARCINOMA IN A DOG

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A five year-old, male German shepherd dog was referred to the Veterinary Teaching Hospital, Peradeniya, with a complaint of non-responsive ocular discolouration for a period of over a month. Initially, the owner had noticed a dark-blue discolouration in the left eye, which gradually changed to white. According to the owner, the animal otherwise had been in good health throughout this period, active and alert, and the sight of the right eye had also been good. No ocular discharges or severe pain was detected. The dog had been treated with dexamethasone, neomycin eye-drops for two weeks. Corneal opacity resolved slightly with the treatment but there was severe neovascularization of the sclera.

Ophthalmoscopic examination revealed that the affected eye was protruding with severe scleral neovascularization, vertical slit-like pupillary opening resulting from severe iritis. It was impossible to visualise the internal structures due to inadequate pupillary opening. No photophobia, lacrimation or pain was detected on palpation and had normal palpebral reflex.

On the first visit to the Teaching Hospital, the condition was tentatively diagnosed as severe iritis. Treatment was initiated with a mydriatic (atropine sulphate 1%) and a steroid eye-drops (dexamethasone 1%). As there was no improvement with this treatment, immuno-suppressive therapy with oral cyclosporine 2 mg/kg twice a day for three weeks was instituted, suspecting it was an ocular neoplasia. Ciprofloxacin 5 mg/kg twice a day was also given as a prophylactic measure. With no response to medical treatment, enucleation was carried-out and a histopathological examination of the growth was also performed. The specimen received for histopathological examination was a white firm mass (measuring 3x3cm) with areas of pigmentation on the surface. The histological examination of the specimen indicated features of ocular carcinoma, the tissue consisting of polymorphic cells arranged in irregular acini. The nuclei were of varying sizes and a high mitotic index was also observed. Even though this carcinoma is classified under malignant neoplasms, prognosis following enucleation is thought to be good as metastasis is rare.