Successful Treatment of an Unusually Giant Corneal Epithelial Inclusion Cyst Using Equine Amniotic Membrane in a Dog

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Signalment: A 10-year-old intact male Yorkshire Terrier was referred for investigation of a large elevated and non-painful corneal lesion OD.

Results: Clinical examination revealed a large cyst, which was occupied half of the corneal surface with severe opacification and vascularization. The cyst measured 11mm X 11mm X 13mm. The mass was removed by superficial keratectomy and equine amniotic membrane (AM) was on the large corneal defect to ensure proper corneal healing. The cyst was diagnosed as corneal epithelial inclusion cyst. After surgery, cyst recurrence or any complications were not found in the dog.

Clinical relevance: Corneal epithelial inclusion cysts are uncommonly reported in dogs. Although superficial keratectomy alone may be sufficient to remove small cyst, the combination of superficial keratectomy and AM transplantation should be considered as an effective method to remove large cysts and repair large corneal defects. This is the first case report of the combined application of AM and superficial keratectomy to successfully treat a corneal inclusion cyst in a dog.

Key words: mass, corneal epithelial inclusion cyst, superficial keratectomy, amniotic membrane, dog

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