



A Monthly e Magazine
ISSN:2583-2212
Dec 2023 3(12) 4130-4132

Popular Article

Non-surgical Management of Prolapse of Third Eyelid Gland in Dog- A Case Report

S. Gautam

University RAJUVAS, Bikaner

<https://doi.org/10.5281/zenodo.10361710>

Abstract

A three-year-old uncastrated male American bully dog is presented with the condition of epiphora due to protrusion of third eyelid which covers the medial canthus of the eye and consists of T-shaped flap like cartilage and tear gland, both are helpful in protection of eye. Prolapsed gland seems as a pink to reddish mass. The present condition was managed by medicinal and massage method to replace the third eyelid back to its place. There was no recurrence when the dog was followed-up for 2 months after management.

Key words: Dog; Cherry eye; Third eyelid prolapse

Introduction

The prolapse of the nictitating gland mainly seen in the dog, may be unilateral or bilateral, and usually one eye following the others, often in young and adult dog and known as “cherry eye” (Barnet Keith, 2006). Third eyelid or nictitating membrane is a structure located in the inside corner of the eye. It is a modified conjunctival fold that is present in medial canthus of most animal species. The significant function of the third eyelid is to protect the eye and distribute the tear film. The main cause of prolapse is weakening of supportive ligament that fixes the gland (Schoofs, 1999). Breeds especially Pekingese, Neapolitan Mastiff, Cocker Spaniel, Beagle, Bulldog and Basset Hound are more prone to this pathological syndrome (Herrera, 2005; Moore, 1998). The disease can occur in dogs of any age group but is most common in young ones i.e. puppies. This can occur in 2~3 years of age and may be unilateral or bilateral (Gellat, 1991). Genetic basis of the disease is not identified and third eyelid is important in protection of eyes as well as production of tears (Gellat, 1991). The eversion of nictitating gland is written off as glandular hyperplasia, hypertrophy, nictitating gland adenoma, protrusion of gland or cherry eye (Mitchel, 2012). The present case to report the cherry eye disease in dogs from Rajasmand district of Rajasthan.

Case Description

A 3 years old uncastrated male dog (American bully) was presented to Veterinary Polyclinic Hospital, Rajsamand, with a complaint of reddish pink mass like structure protruding out at the base of right eye from the medial canthus. The size of the structure was similar to that of cherry with bright pink color. This condition was 10 days standing and the patient was in great

4130



stress due to severe irritation and lacrimation (Fig 1). Over physical examination dog temperature was found normal i.e., 101.8 °F. Other parameters (Respiration 74 bpm and pulse 85 per minute) were also found in normal range. After diagnosis the dog was treated using eye drops and gentle massage “as the dog is good companion” to the owner over the protrude mass using lignocaine gel over the protruded mass in the clockwise direction and advised for 3-5 min for 2 to 3 times a day. As dog seen in (Figure 2), the prolapsed gland was replaced back to its original position. Along with massage technique the dog prescribed with eye drops with combination of corticosteroid and antibiotic. Before using for corticosteroid eye was check for any corneal ulceration. The animal was follow up for recurrence and there was no recurrence up to 2 months post treatment. ,



Figure: 1



Figure: 2

Discussion

The third eyelid covers the medial canthus of the eye, consists of T-shaped flap like cartilage and tear gland, both are helpful in protection of eye. Prolapsed gland appeared as a dark pink to reddish mass and misdiagnosed as a tumor and treated in which gland was excised out, but this resulted in dryness of the eye because third eyelid gland or nictitating gland is one of the tears producing glands that keeps the eye moist. The main complication after its removal was keratoconjunctivitis sicca (KCS) (Gelatt, 1999). Third eyelid gland produces 30% of the total tears (Gellat, 1991; Saito et al., 2001) which are important for the intactness of eyelid, eyeball surface and conjunctiva (Davidson and Kuonen, 2004). This prolapse happens because of the loss of tensile strength of the peri-orbital supporting ligament that anchors the gland to the peri-orbit (Mitchel, 2012). So, the prolapsed gland becomes exposed to the external environment which leads to increase in the glandular size due to abrasion and drying (Moore, 1998; Gellat, 1991). Regarding its treatment, two methods are usually adopted; excision of gland and replacement of gland. Excision of gland is an old method and not recommended now-a-days because the whole gland is nipped at its base which leads to 'dry eye'. This causes further complications. Regarding second option, cosmetically correction of prolapsed gland is the most recommended method in which 'tucking' technique is usually used. Previously single tucking technique was used but if somehow suture may adhere, this will cause blepharospasm and visibility of the suture. So this method is modified now and a wedge of tissue is removed but how much tissue is removed and



tiny sutures will tightens the gap or not, are the major points of consideration. Main complications of modified techniques are inflammation, chances of recurrence and failure of stitch holding capacity. The present case was treated by simple massage method followed by no recurrence. So it is suggested that the massage method to replace the prolapsed third eyelid is considered one of the best and safest methods to treat the cherry eye condition in dogs if there is no recurrence.

References

- Barnet Keith. 2006. Diagnostic Atlas of Veterinary Ophthalmology. Second Edition. Mosby Elsevier. London. Page: 26.
- Schoofs S.H., 1999, Prolapse of the gland of the third eyelid in a cat: a case report and literature review, J. American Ani. Hosp. Assoc., 35(3): 240-242 PMID:10333264
- Herrera D., 2005, Surgery of the Eyelids, Proceedings of the World Small Animal Veterinary Association Mexico City, Mexico, 1-4 PMID:16203008
- Moore C.P., 1998, Terceira pálpebra. In: Slatter D., Manual de cirurgia de pequenos animais, 2nd Ed., Paulo: Manole, 2: 1428-1435
- Gellat K.N., 1991, Canine lacrimal and nasolacrimal diseases, In: Veterinary Ophthalmology, 2nd Ed., Lea & Febiger, Philadelphia, pp.276-289
- Mitchel N., 2012, Third eye lid protrusions in dogs and cats, Veterinary Ireland Journal, 2(4): 205-209
- Gelatt K.N., 1999, Veterinary ophthalmology, 3rd Edition, Lippincott Williams & Wilkins, Philadelphia, pp.1544
- Davidson H.J., and Kuonen V.J., 2004, The tear film and ocular mucins, Vet. Ophth, 7(2): 71-77 <http://dx.doi.org/10.1111/j.1463-5224.2004.00325.x> PMID:14982585

