

SURGICAL MANAGEMENT OF NICTITANS GLAND PROPLASE IN DOGS

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Four cases of dogs; two German spitz (five years old each) and two Labrador retriever (three and seven years old) were presented for treatment of prolapsed of nictitans membrane (Cherry eye). The cases were in chronic conditions and earlier treated with antibiotics and analgesics. After diagnosis, the cases were surgically managed with pocket technique and they recovered without any recurrence.

Keywords: Cherry eye, Dog, Nictitans membrane.

Prolapse of the third eyelid gland or Cherry eye is a common ophthalmic problem of dogs and rarely of cats (Rais *et al.*, 2015). The cause of cherry eye is unclear (Dugan *et al.*, 1992). Despite some reported cases indicating these deformations' self-repair, they should be surgically corrected for cosmetic and functional reasons (Rezaei *et al.* 2019). Dewangan *et al.* (2018) suggested Modified Morgan Pocket Technique for the management of Prolapse of the Third Eyelid Gland in Dogs.

Case History and Observations

Four Dogs, two German spitz (5 years old each) and two Labrador retriever (3 and 7 years old) were presented for problems of swelling at the inner canthus of one or both eyes (fig.1) with the details as given in (Table-1). The Dogs were earlier treated with analgesics and antibiotics for a period of 7-10 days. The progression of swelling was very slow. After careful examination, it was confirmed as chronic cases of prolapsed of nictitans membrane. Hence, it was decided for surgical management of the conditions.



Fig.1: Cherry eye condition

Table-1: Patient description

Sl. No.	Breed	Age	Gender	Body weight	Eye affected
1	German Spitz	5 years	female	12 kg	Right eye

2	Labrador retriever	7 years	Male	27 kg	Bilateral
3	Labrador retriever	3 years	Male	29 kg	Left eye
4	German spitz	5 years	Male	13 kg	Right eye

Surgical Treatment

In all the cases, the Dogs were prepared for surgery as per standard operating procedure. The animals were administered with inj. glycopyrolate @ 0.01 mg/kg. bw. intramuscularly, inj. inj. butorphanol @ 0.2 mg/kg. bw. Intravenously, inj. dexmedetomidine @ 5mcg/kg. bw. intravenously as preanaesthesia and inj. Tiletamine + Zolazepam @ 10 mg/kg. bw. was administered intravenously for smooth induction and maintenance of general anaesthesia. The third eye lid was painted with diluted povidone iodine and was grasped with plain thumb forceps. A circular incision was given at the base of the prolapsed mass. Then, the free incised margin was grasped with tissue forcep and by conjunctival scissor, the prolapsed mass was detached from outer membrane. The mass was pushed in to the pocket made due to detachment. Vicryl no. 3-0 was used for suturing and was retained after taking bite from outer surface of membrane. The needle was inserted from outer to inner side of the nititans membrane and then was inserted within the inner margin of outer flap, then pushed back. In this fashion, that the total incised margin was repaired. Knot was placed outside so that the outer flap cover up the inner margin. The eye was flushed with RL and instilled with povidone iodine eye drop. Post-operatively inj. Ceftriaxone @ 15 mg/kg body weight and inj. Meloxicam @ 0.2 mg/kg body weight were given intramuscularly for 5 days and 3 days respectively. Moxifloxacin eye drops and difluprednate eye drops were instilled four times a day for 10 days. The owner was advised to apply appropriate size E- collar to prevent mutilation done by the animal.

Results and Discussion

In the reported cases of cherry eye condition, there were three unilateral cases and one bilateral case. Among four dogs three were male and one was female. Because the tear production of the gland significantly contributes to total tear amount needed by the eye, considering possible predisposing the dog to dry eye, surgical reposition of the gland is done. In all the cases, pocket technique was used to reposit the prolapsed nictitans membrane to original position as also reported by Yaygingul *et al.* (2020). All the animals recovered within 10 days without any complication. The dogs were followed up to 4-5 months and no recurrence was found.

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