

## Successful Management of Corneal Dermoid in a Cross Bred Calf

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*Corneal dermoid was reported in a seven month old cross bred calf and removed successfully by superficial keratectomy.*

### KEYWORDS

Dermoid, keratectomy, calf.

### INTRODUCTION

Ocular dermoid is a congenital defect recognized in animals (Barkyoumb and Leipold, 1984), characterized by the islands of skin that are histologically normal but misplaced to an abnormal location, usually the lateral canthus, limbus, third eyelid, medial canthus, cornea and eye lid. Dermoids are usually corrected surgically as they cause interference with the vision (Roberts and Lipton, 1975) and (Dice, 1980).

The present communication deals with the surgical management of corneal dermoid in a cross bred calf.

### MATERIALS AND METHODS

A seven month old cross bred calf was presented to the Central Veterinary Hospital with signs of profuse lacrimation and mild inflammation of left eye. As per history a small unusual mass (cyst) was detected at birth in the left eye which developed gradually and increased in size. The animal was carefully examined and restrained for surgical removal of the cyst.

Auriculopalpebral nerve block was achieved by using 7 ml of Lignocaine HCl to cause motor

paralysis of the eyelids. Since this block does not cause analgesia of the eye ball topical anesthesia (Lignocaine HCl) was also used and superficial keratectomy was performed to remove the cyst. The cyst was excised completely without scarring the cornea. The lesion was carefully dissected from the underlying cornea to avoid injury to the anterior chamber of eye. The surgical wound was closed normally. Post-operative Eye drop Ciprofloxacin was used T.I.D. for five days. The calf was again examined after one month to rule out any re-occurrence.

### RESULTS

Clinical findings and history indicated that the calf had congenital ocular malformation of corneal dermoid (Fig. 1). Dermoid was removed successfully by superficial keratectomy. Post-operative recovery was uneventful and re-examination after one month did not reveal any recurrence of dermoid.

### DISCUSSION

Ocular dermoids are skin or skin-like appendages that arise usually on the limbus, conjunctiva and cornea (Ismail, 1994). Dermoid occurs sporadically in numerous cattle breeds and can be unilateral or bilateral (Williams and Gellat, 1981). It is believed to be due to a heritable autosomal recessive and polygenic trait. The dermoid may contain many elements of normal skin such as epidermis, dermis, fat, sebaceous glands, hair follicles and frequently hair. These tissues or hair follicles usually irritate the eye and the animal suffers from chronic epiphora, conjunctivitis or keratitis (Pandey et al., 2011) and may even cause

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visual impairment (Nuh et al., 2012). Ocular dermoids have been reported and corrected surgically earlier in canines (Dice, 1980), felines (Roberts and Lipton 1975), bovines (Shiju et.al, 2010) and many other farm animals (Ismail, 1994).

#### REFERENCES

1. Barkyoumb, S.D. and Leipold, H.W. Nature and Cause of Bilateral Ocular Dermoids in Hereford Cattle. *Vet. Pathol.* 1984 21: 316-324
2. Dice, P.F. Primary corneal disease in the dog and cat. 1980 *Vet Clin North Am [Small Anim Pract]*.10: 339-356
3. Ismail,S.F. Ocular Dermoids in some Farm animals 1994 *Assiut.Vet.Med.J.*30.212-20
4. Nuh, K., Nihat, T. and Erkman,T.E. Surgical Treatment of Corneal Large Dermoid in a Simmental Calf, 2012, *Acta Scientiae Veterinariae.* 40(2)1041

5. Pandey, S.S.; Bharti, B.;Patidar,A. and Shukla, N. Surgical correction of corneal dermoid in a cross bred calf. 2011 *Veterinary Practitioner.*12:1: 32-33
6. Roberts, S.R and Lipton. *The eye in Feline medicine and Surgery* 1995 Cattcot,E,J ed 2nd eds, American veterinary Publication, Inc, USA, PP485-518
7. Shiju.S,; M.B. Justin William, G.D.Rao, R.Sivashankar, Suresh Kumar, Conginital Malformation in Ruminants and its surgical management. 2010,*Veterinary world*3 (3); 118-19
8. Williams, L.W. and Gellat,K.N. *Textbook of Veterinary Ophthalmology.* 1981 Lea and Febiger, Philadelphia. pp 606-648.

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FIGURES

Fig.1: Corneal Dermoid in left eye.



Fig.2: Surgically removed corneal dermoid.

