SURGICAL MANAGEMENT OF DERMOID CYST IN A CALF

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Introduction

Ocular dermoid is a skin or skin like appendage usually arising on the limbus, conjunctivae and cornea. It can be unilateral or bilateral and may be associated with other ocular manifestation or with other malformation. Hairs from the lesion is predominantly responsible for the associated irritation resulting in chronic inflammation of conjunctivae and cornea and may cause visual impairment (Barkyoumb and Leipold, 1984 and Moore *et al.,* 1999). Dermoids may affect the eyelids, conjunctiva, nictitans, sclera and cornea which are most commonly present unilaterally. Bilateral ocular dermoids have been reported in cattle (Croshaw,1959; Yeruham *et al*., 2002). The present paper deals the surgical management of bilateral dermoid cyst in a female calf.

Case history and Observation

A six-day-old calf weighing approx. fifty kg was found in good bodily condition and no further abnormalities were detected on physical examination was presented in Ranchi Veterinary Clinical Complex with an abnormal appearance of both eyes since birth. Clinical examination revealed the slight vision in right eye whereas, no vision in the left eye. There was a large fleshy mass containing hairs was attached to sclera and cornea of both eyes with excessive lachrymation (Fig. 1). The case was diagnosed to be a congenital dermoid cyst.

Treatment and Discussion

The calf's eyelashes were trimmed, then the eye was washed with normal saline solution to remove the contaminants and then dried with sterilized gauge. Lignocaine hydrochloride was infiltrated in upper and lower eyelids after controlling the animal in lateral recumbency. Eye speculum was used for proper exposure of operative field. The dermoid was grasped with allis tissue forceps and the chromic catgut no.1/0 was used for ligation and suturing of stamp of dermoid mass. The mass was excised and bleeding was controlled by instillation of adrenaline solution. The same procedure was carried out with another eye. Eye was flushed with NSS solution 2-3 times until blood clot was removed from the eye (Fig. 2). Post-operatively, gentamicin and cortisone eye drop was intilled @ 4 drops b.i.d in both the eyes followed by systemic administration of inj. gentamicin @ 3 ml intramuscularly for 5 days. The calf made uneventful recovery with appearance more vision and absence of lachrymation in the right eye whereas, vision was absent in the left eye even after 15th day post-operatively.

Ocular dermoid in cattle are not common with an estimated prevalence of 0.002-0.4% (Brunedall, *et.al.,* 2008). Ocular dermoids have been reported in cattle of many breeds worldwide (Yeruham *et.al.,* 2002). The apparent predisposition in Hereford is largely based on report by Barkyoumb and Leipold (1984). Excessive lacrimation in the present case was due to irriation caused by hair and cyst in the eyes.

Fig. 1: Animal with dermoid cyst.

Fig. 2: Eye after surgery

Ocular dermoids may be associated with other congenital ocular or multiorgan abnormalities, which was not found the present case. Barkyoumb and Leipold (1984) described cardiac defects (teratology of fallot and patent ductus arteriosus), polycystic kidney disease and small masses protruding into the external nares in some of the 75 calves reported with ocular dermoid, although they did not specify the no. of calves affected and whether calves showed one or combination of the three abnormalities.

References

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