

Removal of Dermoid Cyst in a German Shepherd Dog

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Introduction

Dermoid is a congenital choristoma affecting eyelids, conjunctiva (palpebral and bulbar), nictitating membrane and cornea (Gelatt, 1973) characterized by the presence of heterotopic cutaneous tissue in an inappropriate place (Slater, 2001). This condition is known to occur in large breed dogs such as St. Bernards, German Shepherds, short-legged dogs such as Basset Hounds, Dachshunds and Welsh Corgis (Priester, 1972) and cats (Lettow et al., 1974). Dermoids contain many of the elements of normal skin such as epidermis, dermis, fat, sebaceous glands, hair follicles and frequently there is hair. The tissues are usually irritating the eye and associated structures. Thus, the patients have been suffered from chronic epiphora and keratitis. Conjunctival dermoids may involve the subconjunctival tissue and the adjacent subcutaneous tissue of the eyelid also.

Case history and observation

A one and half year old German Shepherd dog weighing 17 kg was referred to Department of Surgery with a complaint of abnormal hair growth in eye since two months. The patient had suffered from chronic epiphora and ocular discharge. On ophthalmic examination, left eye revealed mild conjunctival hyperemia at the temporal canthus. Upon Fluorescein stain ulcer was not seen in the affected eye. Keratitis was evident with slight opacification of the cornea because of longer and thicker hair tuff rubbing against cornea.

Surgical management

The patient was premedicated with atropine sulfate (0.04 mg/kg, SC). Anaesthesia was induced with diazepam @ 0.5 mg/kg and ketamine @ 5 mg/kg IV taken in the same syringe. The patient was administered a balanced electrolyte solution @ 10 ml/kg/hr, IV and Ceftriaxone sodium @ 20 mg/kg, IV as prophylactic treatment before surgery. After fixation of

the globe, abnormal tissue at the conjunctiva was removed using the blade (No. 11) and microsurgical instruments under operating microscope. Haemorrhage was controlled using ophthalmic cautery. Atropine sulphate eye ointment at night and ofloxacin eye drops four times daily was prescribed for 2 weeks after surgery. The dog had an uneventful recovery with normal vision as reported by the owner one and half month later.

Discussion

Bilateral corneal dermoids have been reported in dogs (Gelatt, 1971 and Lee et al., 2005). Histopathologically, melanocytes, melanin granules, hair bulbs, adipose tissue and sebaceous and sweat glands were observed in the corneal epithelium and propria. Conjunctival dermoids can be easily treated by simple excision. The tissue has to be completely excised to prevent recurrence of the condition.

The operation of dermoid was delayed in this case on owner's request. Consequently, the lesion increased in size and extended more invasively.

However, dermoid was removed successfully and recurrence was not reported so far.

References

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