Ophthalmology Snapshot

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History

A nine-month old, male Shih Tzu was referred from a private animal hospital to Ophthalmology Clinic, Animal Teaching Hospital, Faculty of Veterinary Science, Chulalongkorn University. Bunch of hairs oriented to the temporal portion of the left eye had been noticed. No Ocular pain was observed.

All neuro ophthalmic responses were positive. Blink reflex was complete on the left eye though it was quite unsmooth through lusterless cornea. Light examination revealed moderate corneal pigmentation. STT 1 was 8 mm wetness.

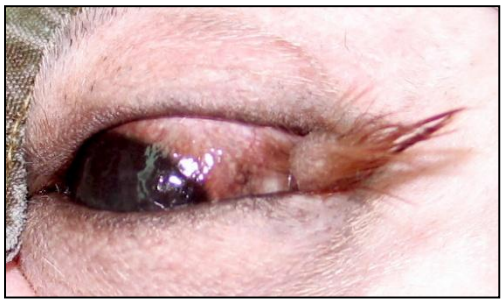

Figure 1 Photograph of the left eye of the dog.
(For better quality of photographs, please visit the TJVM website)

Question

What is the appropriate treatment of this case; repositioning or removal of the globe?

Please turn to next page for the answer.

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Answer

Epibulbar dermoid (involving conjunctiva and eyelid)

Comments

Dermoid is a well differentiated, non-neoplastic tissue that rises by focal skin-liked differentiation during development. It is called choristoma; normal tissue in an abnormal location. Most dermoid consists of stratified squamous keratinized epithelium overlying dermis. This focal area of epithelium consists of hair follicles, regular hairs and other skin components. Ocular dermoid is usually involved cornea, conjunctiva, eyelid margin, limbus or these organs in various combinations. With continuous hair growth, associated ophthalmic signs from chronic irritation on ocular surface are such as corneal edema, ulcerative keratitis, conjunctival hyperemia, ocular discharge and accumulation of pigment. In this particular case, skin with sprouting hairs at the lateral limbus interferes with complete lid closure.

Dermoid is considered congenital abnormality that may not often be noticed at young age. Inheritance of ocular dermoid has been reported to encounter in German shepherd, Dachshund, Saint Bernard, Dalmatian, Burmese cat and Hereford cattle. Typical locations of ocular dermoid in Shih Tzu are cornea, as well as bulbar and palpebral conjunctiva at lateral canthus.

Surgical excision is recommended to reduce irritation without compromising vision. It is often curative if complete removal. However, caution must be noted because depth of lesion varies. If lateral canthus is involved, lateral canthoplasty to remove the offending dermoid and to reform lateral canthus is required. In this case, conjunctivectomy in combination with eyelid resection was performed. Care should be taken to ensure best preservation of adjacent area.

Reference

Hartley C 2014. The conjunctiva and third eyelid. In: BSAVA Manual of Canine and Feline P[hthalmology. 3rd ed. Aberystwyth: Cambrian Printers. P 183

Christmas RE 1992. Common ocular problems of Shih Tzu dogs. Can Vet J. 33: 390-391.