

Ophthalmology Snapshot

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History

A four-year-old, female Miniature pinscher had presented to the Ophthalmology Clinic, Animal Teaching Hospital, Faculty of Veterinary Science, Chulalongkorn University with ocular pain on the left eye. She had been treated with topical antibiotics for 2 weeks from the private veterinary hospital but not yet

improved.

She showed apparent ocular pain during examination (Fig. 1). Her STT 1 value of the left eye was 21 mm wetness. Her intra ocular pressure was within normal limit. Fluorescein staining test was positive. Stromal corneal ulcer of 4 mm in diameter was observed in the superotemporal quadrant of the cornea (Fig. 2).

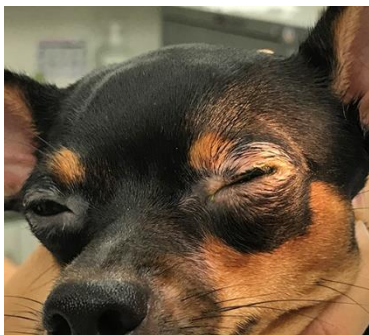


Figure 1 Ocular pain on the left eye of the Miniature pinscher during ophthalmic examination

(For better quality of photographs, please visit the TJVM website)



Figure 2 Left eye of the Miniature pinscher following fluorescein staining test

Question

What is the underlying cause of left ocular pain?

Please turn to next page for the answer.

Answer

Microblepharon (Blepharophimosis)

Comments

Microblepharon is a condition that palpebral fissure is small than normal. Though globe may appear small because of limited exposure, this condition is not microphthalmia (small eyeball). There are some dog breeds commonly affected; Chows, Chinese shar pei, Collie, and some Terriers. Tight lid-globe conformation is observed so that conjunctiva and sclera are hardly be examined. As in this Miniature pinscher, epiphora and blepharospasm are the most common clinical signs to owners. Entropion results in significant corneal damage especially serious corneal ulcer in some cases. Close ophthalmic examination benefits correct diagnosis of a small palpebral fissure as a primary cause over an entropion.

If minimal or no clinical signs are noticed, therapy is not necessary. If the lesion is moderate to severe due to a rolling inward of the lateral canthus, surgery may be required. Lateral augmentation canthotomy may help to lengthen the palpebral fissure. This surgery requires the reflection of the conjunctiva onto the new palpebral margin. Y-V procedure is a surgery to correct entropion involving a short length of the lid. If it is the second attempt of surgical correction of microblepharon, creation of a lateral canthal ligament from the orbicularis muscle may be considered to evert the lateral canthus.

Reference

- Van der Woerd A, 2004. Adnexal surgery in dogs and cats. *Vet Ophthalmol.* 7(5); 284-290.
- Westermeyer HD and Hendrix DVH, 2016. Basic ophthalmic surgical procedures. *Veterian key.* Chapter 124. <https://veteriankey.com/basic-ophthalmic-surgical-procedures>.