

Correction of Corneal Ulceration by Tarssoraphy in a Horse

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Introduction

Tarsorrhaphy is the procedure of closure of eyelids either temporarily or permanently. Temporary tarsorrhaphy frequently is indicated in large animals for treatment of corneal ulcers (Oehme, 1994). The causes of corneal ulceration are trauma, chemicals, bacterial, viral and fungal infection, tear film abnormalities, cilia abnormalities, exposure keratopathy, sharp or blunt trauma (from rubbing, foreign bodies, grass awns, whips and shanks (Peiffer, 2001). Injuries which initially only involve the epithelium are termed abrasions while deeper injuries, involving the stroma are termed as ulcers.

Case History and Treatment

A six year old horse, used for draft purpose was brought to the B.S.D.P.H.A (Bai Sakharbai Dinshaw Petit Hospital for Animals) with the history of excessive lacrimation and partial closure of right eyelid. Clinical examination of right eye was done under bright light source, which revealed the presence of corneal ulceration in the right eye. The left eye was found to be normal in condition.

Temporary tarsorrhaphy was done by taking three simple interrupted sutures through eyelid margin just anterior to gray line without tearing the lid margin by the non absorbable suture material (nylon) under local anaesthesia using Lignocaine 2%. The eye was medicated with Strepto-Penicillin preparation via subpalpebral route for 15 days and the sutures were removed after 15 days.

Results and Discussion

In the present case the corneal ulceration was

caused due to the constant irritation caused by the halter tied around the head. Tarssoraphy provides partial coverage and helps in the treatment of corneal ulcers by bringing about apposition of the eyelids which helps retain the topical solution for longer periods. The sutures placed near and within the 'grey line' holds the eyelids together without tearing the lid margins as they do not penetrate the full thickness thereby avoid damaging the cornea and provide partial coverage for the healing cornea. Temporary tarsorrhaphy is effective for 7 to 21 days (Gelatt, 1994). Treatment for corneal ulcers should be aimed at preventing infection, reducing inflammation and keeping the pupil dilated. All ulcers should be treated prophylactically with broad-spectrum or gram-negative-targeted general antibiotics. Topical corticosteroids are contraindicated in corneal ulceration. As bright light can be painful, horses with corneal ulcers should always be kept in darkened stables or the affected eye should be taped over.

References

1. Blogg J.R. (1980): "*The Eye in Veterinary Practice*", Vol 1, W.B.Saunders Pub, Philadelphia, pp: 485-486.
2. Gelatt K.N. and Gelatt J.P. (1994): *Handbook of Small Animal Ophthalmic Surgery*, Vol 1, Elsevier Science Ltd, New York, pp: 76 and 77.
3. Gelatt K.N (1991): "*Veterinary Ophthalmology*", 2nd Edn, Lea & Febiger Pub, Philadelphia, pp: 274.
4. Oehme F.W. (1988): "*Textbook of Large Animal Surgery*", 2nd Edn, Williams and Wilkins Pub, U.S.A, pp: 623-670.
5. Peiffer R.L, Peterson-Jones S.M. (2001): "*Small Animal Ophthalmology - A Problem Oriented Approach*", 3rd Edn, W.B.Saunders, pp: 172-218.

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