

CLINICAL MANAGEMENT OF IMMUNE-MEDIATED KERATITIS IN EQUINES

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ABSTRACT

A total number of four ponies ageing between 3 to 8 years with a history of unilateral corneal opacity of varying degree were selected for the study. All other parameters were found to be normal on routine checkup. The animals were found to be visually disturbed. The animals were treated with Cyclosporine (Cyclomune 0.05%) eye drop @ 4 drops at 6 hourly interval for 16 days. On 45th day, 3 out of 4 animals were found to be recovered.

Keywords: Ponies, corneal opacity, IMMK, cyclomune

INTRODUCTION

Immune-mediated keratitis (IMMK) is a common non-infectious eye disease in horses. It is commonly referred as Corneal opacity. IMMK generally affects one eye but it can affect both eyes rarely. The cause is believed to be mediated by a dramatic corneal immune response to foreign protein, microbial antigen or a self-antigen. There are four specific types of IMMK, each characterized by the depth of the corneal lesion. These include epithelial, superficial stromal, midstromal and endothelial. Superficial stromal keratitis is the most common type of IMMK affecting horses.

CASE HISTORY AND OBSERVATIONS

Four middle aged ponies with a history of cloudy cornea were selected for the study. The animals were suffering from sight disturbance. On careful examination the cause was found to be Epithelial Immune Mediated Keratitis (IMMK) with the intensity ranging from mild to moderate.

TREATMENT AND DISCUSSION

All four animals were kept on clean surrounding. The affected eye was initially washed with normal saline to facilitate dust removal. Absorbent cotton was used to wipe out excess saline. Cyclomune 0.05% eye drop was instilled @ 4 drops on affected eye of each animal at 6 hourly interval for 16 days. All animals showed significant improvement from 11 days post treatment with gradual clearing of cornea. Three out of four animals recovered completely on 45th day from the date of treatment. Results were in agreement with the findings of Gratzek *et al.* (1995), who successfully treated 9 cases of IMMK out of 11 cases using cyclosporine as topical eye drop. The present finding also correlates with the results of Gilger *et al.* (2005), who demonstrated superficial IMMK can be well treated with topical medicines.

SUMMARY

Immune-mediated keratitis (IMMK) is a common term amongst horse keepers. IMMK has been found to be a door-to-door problems in developed countries too which imparts huge economic loss due to vision disturbances. Proper diagnosis and timely treatment with effective medicine can minimize and even cure if encountered in early stages.

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