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Incidence of Eye Affections in Dogs

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Abstract

A total of 8760 cases of dogs registered at TVCC of college of veterinary science and A.H. Jabalpur during the period of 9 months (August, 2015 to April, 2016) were screened. Out of these 3872 (44.20%) cases were referred to Department of Veterinary Surgery and Radiology, of which 122 (1.39%) dogs were suffering with various eye affections. Majority of the animals were affected with cataract (38.52%), followed by corneal ulcer (13.11%). The incidence of rest of the eye affections was less. Majority of animals were non-descript (38.62%), between 6 to 10 years (47.54%) of age. Sex wise incidence was higher in male (70.49%) dogs.

Key words: Dogs, Eye affections, Incidence, Cataract, Corneal ulcer.

Introduction

Dogs are affected by various ocular disorders, some of the most common are cataracts, glaucoma, corneal ulcer, corneal opacity, lens luxation, cherry eye, uveitis, corneal dystrophy and dry eye. Corneal ulceration or ulcerative keratitis is one of the most common extra ocular diseases identified in dogs (Gelatt, 2000). The literature on the prevalence of eye affections in canine under Indian context is meager. Hence the purpose of this study was to determine the incidence of occurrence of various eye affections in dogs.

Materials and Methods

Total 8760 cases of dogs registered during the period of 9 months (August, 2015 to April, 2016) at TVCC of college of veterinary science and A.H. Jabalpur were screened. Out of these, 3872 (44.20%) cases were referred to Department of Veterinary Surgery and Radiology, of which 122 (1.39%) dogs were suffering with various eye affections. Ophthalmic examination and direct ophthalmoscopic examination was done on all the canine cases irrespective of age, sex and breed brought to TVCC during study period showing the problems related to vision. The detailed history of age, breed, sex, hereditary origin, diet and any trauma of the eye was recorded. Eye was palpated by index finger to check the intra-ocular pressure, vision was judged by palpebral reflex and menace (Blink) reflex in addition, epiphora, conjunctivitis, hyphema, foreign body and location of ulcer (axial, paraxial, inferior nasal, inferior temporal, perilimbal) were also recorded. Schirmer tear test, fluorescein dye test, ophthalmoscopic examination, ultrasonographic examination including

microbiological examination were performed to check the intraocular pathology and other abnormalities of the eye.

Results and Discussion

In the present study, majority (38.52%) of the dogs were suffering with cataract (38.52%), followed by corneal ulcer (13.11%) and protrusion of eye ball (7.45.) Accidental injury (5.81%) wart (4.92%), glaucoma (4.92%), wound, conjunctivitis and corneal opacity 4.09 % each ; fungal infection, conjunctivitis + corneal opacity, corneal dystrophy and third eyelid protrusion 1.63 % each and others below 1.0 % (0.81 %) include corneal opacity + wart, completely blind, Glaucoma +corneal opacity, Impaired vision, Entropion, Hyalitis, Epiphora, and Cherry eye. These findings were in consonance with the findings of Petrick (1996) and Juliet (2011). Contrary to this, Sellamani (2008) and Ramani reported lower incidence of 18.20 and 23.12 % cataracts in dogs. These discrepancies in findings may be attributed to fact that non-descript dogs are popular in India and reared maximum by the middle class peoples especially in the urban areas as they are more resistant to diseases and require least maintenance as companion animals.

The majority of the dogs suffering from various eye affections in this study were non-descript (38.62%), followed by Pomeranian (31.97%), Labrador (13.93%), German-shepherd (4.91%) ; Pug, Great Dane, Boxer and Lhasa Apso 1.63 % each, and lowest 0.81% of Bullmastiff, cocker Spaniel and Rottweiler.. On the contrary higher incidence (38.46%) in German Shephard, Pug (37.36%), Spitz (65%) by Deuri *et al.* (2012), Ramani *et al.* (2013) Sale *et al.* (2013) Respectively. In the present study this difference may be due to higher population of non-descript dogs in and around Jabalpur.

In the present study, majority of animals were between 6 to 10 years (47.54%) of age, followed by 11 to 15 years (31.96%) and 0 to 5 years (20.49%). These findings corroborated well with Sale *et al.* (2013) who found highest incidence in 5 to 10 years (55%) old dogs. Contrary to this, Deuri *et al.* (2012) reported higher incidence in dogs above 8 years (47.25%) of age. Akinrinmade and Ogungbenro (2015) observed majority of ocular affections occurred in dogs less than 5 years (75%) of age. This finding can be explained by the fact that as the age of the dog progresses regeneration of the epithelium gets slowed down, thus increases chance of incidence of various eye affections. During the present study 70.49% of the animals were male, while only 29.50% were female. This finding was similar to Rajasekaran (2007), Deuri *et al.* (2012), Ramani *et al.* (2013) and Sale *et al.* (2013) who reported higher incidence in male dogs. Higher incidence of male dogs may be due to its more population and aggressive behaviour which increases the risk of trauma to the eye.

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Conflict of Interest: All authors declare no conflict of interest.

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