Short communication

CONGENITAL ANOPHTHALMIA IN A PUP

Anophthalmia is the complete failure in the outgrowth of the primary optic vesicle, with ectodermal and mesodermal structures completely unrepresented. However, the orbits are formed and often contain fibrofatty tissue (Saunders, 1971). The differentiation between anophthalmia and microphthalmia may be difficult clinically and clinical anophthalmia or apparent anophthalmia is the term used to denote a majority of clinical cases wherein the eye cannot be detected. True anophthalmia is rare, but it occur in every class of vertebrates (Gelatt, 1991) including canines (Magrane, 1977).

A male Pomeranean pup, one month old, was presented to the Veterinary College Hospital, Mannuthy, with the history of incomplete opening of right eye. The left eye was normal. There was normal formation of the orbit and the eyelids on the right side, except that the eyelids were separated only for a length of three millimetres. Expecting a normal eyeball inside, the palpebral fissure was extended, but was found occupied by fibro-fatty tissue. Since the left eye was normal, the pup was able to see and have its normal activities.

The congenital ocular defects in canines have been attributed to autosomal recessive genes, dominant genes, teratogens, chromosomal mutation and other unidentified causes (Ashturkar *et al.*, 1996). In this case, the condition was congenital and the cause could not be determined.

K.V. Syam and T. Sarada Amma College of Veterinary and Animal Sciences, Mannuthy. 680 651

References

Ashturkar, R.W., Aher, V.D. and Bhokre, A.P. (1996). Congenital anophthalmia in a Kid. *Indian Vet. J.* **73**: 1177

Gelatt, K.N. (1991). Veterinary Ophthalmology. 2nd ed., Lea and Febiger, Philadelphia. pp. 611-612

Magrane, W.G. (1977). Canine Ophthalmology. 3rd ed., Lea and Febiger, Philadelphaia. p. 182

Saunders, L.Z. (1971). Pathology of the eye of domestic animals. Verlag Paul Parey Publications, Berlin. p. 523