

Short Communication

Prevalence of Some Diseases of Dogs and Cats at the State Government Veterinary Clinic in Maiduguri–Nigeria

A. WILLIAM, S.U.R. CHAUDHARI† AND N.N. ATSANDA‡

Departments of Veterinary Physiology and Pharmacology, †Surgery and Reproduction, and ‡Public Health and Preventive Medicine, University of Maiduguri, Faculty of Veterinary Medicine, P.M.B. 1069, Maiduguri, Nigeria

Corresponding Author-e-mail address william@unimaid.edu.ng

ABSTRACT

A three-year (retrospective) study conducted to determine the prevalence of diseases/clinical conditions of dogs and cats diagnosed at the Government Veterinary Clinic, Maiduguri, from January 1995 to December 1997. The prevalent disease/conditions of dogs included helminthosis (19.19%), accidental injury (18.18%), tick infestation (15.15%) canine distemper (8.42%), diarrhea (6.73%), mange (7.41%), rabies (5.05%) and babesiosis (4.71%). Prevalent diseases/conditions of cats included helminthosis (26.67%), tick infestation (8.89%), diarrhea (16.67%), nutritional deficiencies (15.56%), and respiratory infections (12.22%). The highest in prevalence in dogs and cats was helminthosis (20.93%), followed by tick infestation (13.70%) and diarrhea (9.04%) suggesting a poor husbandry of these pets in Maiduguri. Cases of automobile accidental injury of dogs were also high probably due to the same factors of poor husbandry.

Key Words: Prevalence; Disease; Dogs; Cats; Maiduguri

INTRODUCTION

Generally, pet keeping is associated with certain responsibilities such as housing, disease management and responsible pet ownership with negative consequences for public health when neglected (McKenzie, 1977). Since pets share the same environment with man, they constitute an important reservoir of zoonotic diseases (Kornblatt & Schantz, 1980). In many parts of the world, household pets have been found to play a direct role in transmitting zoonosis (Kornblatt & Schantz, 1980). The gastrointestinal parasites in particular constitute a major source of diseases for dogs in the tropics and have been recognized as an important public health problem in several parts of the world (Dada *et al.*, 1979; Kornblatt & Schantz, 1980).

The routine observations on diseases of dogs and cats presented to the state veterinary clinic in Maiduguri for treatment stimulated the desire of the authors to carry out this analysis.

MATERIALS AND METHODS

The pet animals (dogs and cats) used for this analysis were those presented at the state veterinary clinic Zone I, Maiduguri from January 1, 1995 to December 31, 1997. The diseases were diagnosed by observations of the authors and clinicians during varying visits to the veterinary clinic. The doubtful, diagnosis was confirmed at the University of Maiduguri Veterinary Hospital laboratories and National Veterinary Research Institute (N.V.R.I.) diagnostic laboratory. Helminthosis was diagnosed by the egg

floatation methods, and mange by treatment of skin scrapings in warm caustic soda and microscopic examination.

RESULTS

A total of 387 cases of different diseases/conditions were recorded during the three year period with more than half (207) recorded in 1997 alone. Of the total, 297 were from dogs and 90 from cats. Table I shows the prevalent diseases/conditions diagnosed in the two species during the period under investigation. The diseases/conditions diagnosed in dogs included: helminthosis (19.19%), accidental injuries (18.18%), tick infestation (15.15%), canine distemper (8.42%), diarrhea (6.73%), mange (7.41%), rabies (5.05%) and babesiosis (4.71%). In cat, helminthosis (16.67%), nutritional deficiencies (15.56%) and respiratory infections (12.22%) were diagnosed. In both dogs and cats, helminthosis (81) constitutes 20.93% of the 387 cases while tick infestation (53) and orchitis (14) account for 13.70 and 3.62%, respectively. A sharp increase in number of cases was observed in both species in 1997.

DISCUSSION

The total number of cases recorded in this study is likely to be below average for the area because there are more stray dogs and cats than those properly kept by their owners and brought to the clinic for medical attention. An increasing trend in case diagnosed in cats coupled with a sharp increase in cases in 1997 suggests increasing

Table I. Prevalent diseases of dogs and cats in Maiduguri (1995-1997)

Animal Species	Diseases/clinical signs	Year 1995	Year 1996	Year 1997	Total	Percentage
Dogs	Helminthosis	12(13.79)	15(21.73)	30(21.28)	57	19.19
	Accidental Injury	14(18.88)	4(5.79)	36(25.53)	54	18.18
	Tick Infestation	16(16.09)	15(21.73)	14(9.93)	45	15.15
	Canine distemper	2(2.29)	5(7.24)	18(12.77)	25	8.42
	Diarrhea	3(3.45)	9(1.04)	8(5.67)	20	6.73
	Mange	20(22.99)	2(2.89)	0(0)	22	7.41
	Rabies	11(12.64)	2(2.89)	2(1.42)	15	5.05
	Babesiosis	0(0)	0(0)	14(9.98)	14	4.71
	Dermatitis	0(0)	0(0)	11(7.80)	11	3.70
	Orchitis	2(2.29)	4(5.79)	4(2.84)	10	3.37
	Anoexia	0(0)	8(11.59)	0(0)	8	2.69
	Lice infestation	7(8.05)	0(0)	0(0)	7	2.36
	Respiratory infestation	0(0)	5(7.24)	0(0)	5	1.68
	Anaemia	0(0)	0(0)	4(2.84)	4	1.35
	<u>Sub-total</u>	87	69	141	297	
Cats	Helminthosis	3(30.00)	3(21.42)	18(27.27)	24	26.67
	Tick infestation	0(0)	0(0)	8(12.12)	8	8.89
	Diarrhea	5(50.00)	3(21.42)	7(10.16)	15	16.67
	Nutritional	0(0)	0(0)	14(21.21)	14	15.56
	Deficiencies	0(0)	0(0)	14(21.21)	11	12.22
	Respiratory infection	0(0)	0(0)	11(16.67)	4	4.44
	Septicaemia	0(0)	0(0)	4(6.06)	4	4.44
	Orchitis	0(0)	3(21.42)	4(6.06)	3	3.33
	Rectal prolapse	2(20.00)	1(7.14)	0(0)	3	3.33
	Poisoning	0(0)	2(14.28)	0(0)	2	2.22
	Abdominal disorder	0(0)	2(14.28)	0(0)	2	2.22
	<u>Sub-total</u>	10	14	66	90	
	<u>Grand-total</u>	97	83	207	387	

prevalence for these diseases/conditions. Since this three-year analysis concerned pet animals presented to the clinic from various sections of Maiduguri town and its environs, the diseases/conditions encountered are likely to be the major ones present in dogs and cats in the area. An analysis of the diseases/conditions encountered shown that helminthosis (20.93%), tick infestation (13.70%) and diarrhea (9.04%) are prevalent among the two species of animals. This is in agreement with reports from other parts of the country (Idowu *et al.* 1977; Umoh & Asake, 1982). The high prevalence of helminthosis and ectoparasitism (tick infestation) is also in consonance with observations of previous investigators (Esuruoso, 1972; Idowu *et al.*, 1977).

The authors not only in this investigation but also over the years in Maiduguri area have observed the high prevalence of automobile accident, leading to injury or death of dogs. This is probably a direct result of lack of proper maintenance of pet dogs by their owners and similarly the high number of stray dogs roaming in the streets probably reflected a poor husbandry of these pets in the Maiduguri municipality.

It is recommended that pet owners should care more for their pets by proper housing, feeding, and prevention of contamination of public places by dog feces and regular deworming of dogs. The veterinary profession should continue to educate the public on the health hazards posed by indiscriminate disposal of dog feces and on responsible pet ownership.

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REFERENCES

- Dada, B.J.O., D.S. Adegboye, and A.N.A. Mohammed, 1979. A survey of gastrointestinal parasites of stray dogs in Zaria Negeria. *Vet. Rec.*, pp: 145–6.
- Esuruoso, G.O., 1972. Observations in an experimental veterinary clinic in Ikeja area of Lagos. *Nigerian Vet. J.* pp: 7–15.
- Idowu, L., E.D. Okon, and O.O.A. Diyeolu, 1977. A three year analysis of parasitic diseases of dogs and cats in Ibadan, Negeria. *Bull. Anim. Hlth. Prod. Africa*, pp: 166–70.
- Kornblatt, A.N. and P.M. Schantz, 1980. Veterinary and public health considerations in canine roundworm control. A survey of practicing veterinarians. *J. Am. Vet. Med. Assoc.*, pp: 1212–15.
- Mckenzie, P., 1977. Are dogs a health menace? *J. Small Anim. Pract.*, pp: 359–64.
- Umoh, J. U. and T.T. Asake, 1982. Prevalence of parasite ova and cysts in dog feces deposited on streets of staff quarters of Ahmadu Bello University Zaria, Nigeria. *Nig. Vet. J.*, 11

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