PREVALENCE OF CANINE DISEASES IN LAHORE AREA

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ABSTRACT

A retrospective study was undertaken with the records of 12480 sick dogs brought to Dog Hospital, College of Veterinary Sciences, Lahore or to the private clinics. It was observed that fatal zoonotic diseases like rabies still existed as 2.66 per cent during 1995-97 period in the home kept dogs. The worm infestation was 80 per cent, tick infestation 45 per cent and skin diseases in 22 per cent dogs. It is suggested that the pets should be given proper attention for their vaccination, deworming and other health precautions for the dog's life and as an attempts to eradicate zoonotic diseases.

INTRODUCTION

The dogs are kept as pets by a significant percentage of people all over the world irrespective of their social status. In Pakistan, more or less same trend has been observed for keeping dogs as pets. In Pakistan most of the dogs are kept as watch animals and to a limited extent for game purpose, as a companion, a guide to a handicapped person or as a search or rescue dog by police or armed forces.

Lack of awareness of the principles of health and management the prevalence of quackery in veterinary practice and a large population of stray dogs puts humans at the risk of zoonosis. The present study was, therefore, undertaken to determine the prevalence of different diseases amongst the dogs kept in Lahore and its suburbs.

MATERIALS AND METHODS

The dogs brought to the Dog Hospital, College of Veterinary Sciences, Lahore and other private clinics during the period from 1995-97 were included in the study. Rabies, a major item for zoonosis, was given priority. The data was taken as percentages (Steel and Torrie, 1982). A total of 12480 case records were analyzed. The percentage of laboratory tests for diagnosis of different diseases were also considered in addition to the diagnosis based on clinical symptoms.

RESULTS AND DISCUSSION

Inspite of vaccination schedule presumably followed by the owners, the positive cases of rabies were recorded as 2.66 per cent (Table 1). The results of the present study are congruent with Rehman (1985) and Hussain (1986) who found 2.8 per cent and 1.55 per cent cases of dogs, positive for rabies, respectively.

The prevalence of canine parvovirus disease was 21.33 per cent and that of canine distemper 11.1 per cent. These results are also in agreement with the Udupa and Sastry (1996) who found that 28.6 per cent of pet dogs were positive for parvovirus disease. Zaffer (1997) studied that 10.0 per cent of the diarrhoeic dogs were positive for canine distemper. Yoon *et al.* (1995) at Veterinary Clinics, found 75.0 per cent of the eases positive for parvovirus disease and 67.0 per cent of the cases positive for canine distemper. It is clear that the cases included in the study did not include stray dogs and the significant percentage of the above mentioned diseases is a reflection of carelessness in the preventive management procedures. Rabies cannot be neglected and one rabid dog might be a danger for several other dogs and the human population. The canine parvo and distemper cases are generally confined to young dogs yet their mortality rate is always alarming.

The general diarrhoea was 16.96 per cent and jaundice/anaemia cases 5.45 per cent. Khan (1997) and Zaffer (1997) found that besides other infectious causative factors, diarrhoea and anaemia, in studied dogs, were also due to nutritional deficiencies. The ear infection 15 per cent, paralysis 20 percent and neoplasm cases 0.5 per cent were also more than one can expect in a vigilant society (Table 1). Neoplasms mainly included mammary and vaginal tumours. More than 45 per cent of the total cases showed tick infestation in addition to more than 22 per cent cases which were positive to skin diseases. It was surprising that 80 per cent of the total cases recorded showed worm infestation while amongst them 85 per cent of the cases suffered from hook worm (*Ancylostomum spp.*) infestation.

The prevalence of accidental and other systemic diseases can't be neglected but these do not give a horrifying picture. Only 27.5 per cent cases, according to the history, had received prophylactic vaccination. The attached Table is self-

Table 1: Case-Wise Distribution of Problems Presented to the Dog Hospital During 1995-97

Sr.No.	Diseases/Disorders	Diagnosis	Percentage
	Viral Problems		
01	Rabies	Clinical	2.66
02	Parvo	Clinical	21.33
03	Distemper	Clinical	11.1
	Respiratory Problems		
04	Pneumonia	Clinical	2.4
	Digestive problems:		
05	Choking	Clinical	1.2
06	Gastritis and vomiting	Clinical	1.83
07	Peptic ulcers	Clinical	0.95
08	Gastric carcinomas	Clinical and ultrasound	0.2
09	Diarrhoea	Clinical	16.96
10	Jaundice/anaemia	Clinical & Haematology	5.45
	Urinary abnormalities		
11	Urinary ladder defects	Clinical	1.1
12	Malignant bladder carcinoma	Clinical &Ultrasound	0.3
13	Extrophy of urinary bladder	Clinical	0.5
14	Severe damage in accidents	Clinical	0.65
	Reproductive disorders		
15	Pyometra	Clinical & Culture	1.8
16	Prolapse of uterus	clinical	1.2
	Ear abnormalities		
17	Otitis media	Clinical & Culture	15.0
18	Fistulous infections of pinna	Clinical	2.3
19	Neoplasms	Clinical & Pathology	0.5
20	Fractures	Clinical & X-ray	2.3
21	Paralysis	Clinical	2.0
22	Fight and maggot wounds	Clinical	4.5
	Ectoparasites		
	Tick infestation		
23	*Rhipicephalus sanguineus*	Clinical & Lab Test	45.5
	Mange mite infestation:		
24	Psoroptic mange	Lab. Test	6.4
	Sarcoptic mange:		
25	*Sarcoptes scabiei var canis*	Lab. Test	9.85
	Flea infestation:		
26	*Ctenocephalides canis*	Clinical & Lab. Test	1.95
	Lice infestation:		
27	*Trichodectes canis*	Lab. Test	2.3
	Worm infestation:		
28	*Toxocara canis*	Lab. Test	30.30
29	*Echinococcus granulosus*	Lab. Test	2.55
30	*Taenia hydatigena*	Lab. Test	19.4
31	*Dipylidium caninum*	Lab. Test	13.6
32	Ancylostomes:		
33	*Ancylostoma caninum*		
34	*Ancylostoma braziliense*	Lab. Test	85.4
35	*Ancylostoma duodeneile*		
36	Prophylactic Vaccination	History	27.5
37	Euthanasia	Hopeless cases	2.6

explanatory about the epidemiology of the canine diseases in this area during the above mentioned period. It is rather worrying when one looks at this data which belongs to the dogs which had owners needless to elaborate the hazards of stray dogs. Amongst stray dogs the prevalence of rabies and other fatal diseases is more than that can be expected in a civilised town like Lahore. In a study on stray dogs, Rehman (1985) reported 5 per cent laboratory positive cases of rabies. In a similar study Hussain (1986) observed 6 per cent positive rabies cases. These stray dogs are a constant threat for the spread of zoonotic diseases through accidental contacts to healthy population. The situation of zoonotic and other infectious diseases in stray dogs in the countryside would definitely be more grave and needs a thorough study and prevention. According to the World Health Organization (WHO), in a world wide survey in 1992, reported 35,000 human rabies cases of which 97% were diagnosed in Asia (Anon, 1994). The real figure may be much higher due to unreported cases. For several decades, prevention of animal rabies has been based on the control of stray dogs and the vaccination of domestic animals. Although in most of the developing countries where rabies is endemic, preventive measures have only limited the spread of the disease. Some of the countries like United Kingdom etc., have eradicated rabies but no comparable situation exists in Pakistan.

From this small data, it can be depicted that much more attention is needed to be focussed on preventive vaccinations and control of parasitic diseases in dogs. During this decade the economic conditions, the social awareness and care for human health remained on the top priority yet the dog diseases liable for zoonosis could not be controlled. Therefore, special attention is needed for the eradication of zoonotic diseases in our country.

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