PREVALENCE OF ASCITES IN LOCAL AND EXOTIC BREED OF DOGS IN JOS METROPOLIS

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ABSTRACT

Studies was carried out using clinical records to determine the prevalence of dogs with

ascites in Jos metropolis. The result showed that a total of 96 dogs were presented with ascites from 1997 to 2001 out of which 38 (39.58%) are local dogs and 58 (60.42%) are exotic breed of dogs. The result further revealed that more females (64) are affected than the males (32) representing 66.67% and 33.33%. Also, more adults, 72 (75.01%) are infected than the young puppies, 24 (25.00%).

KEY WORDS: Prevalence, Ascite, Exotic dogs.

INTRODUCTION

In Nigeria, the population of dogs (local and exotic breeds) is being constrained by environmental stress, nutrition, management and disease problems. Some of the diseases arise as consequence of either the environment or of management. The interaction between the environmental factors, health and nutritional status of the animals is multi-factorial and complex. The overall effects can affect the functions of some vital organs of the body (Merck, 1991).

Although, nutritional deficiencies and imbalances are arguably the major cause of ill-health in tropical countries, they are over shadowed by accounts of infectious and parasitic diseases. Malnourished animals have lower resistance to other disorders such as infectious and parasitic diseases (Hunter, 1994; Hunter, 1996). Parasites on the other hand suck blood and derive their nutrients from the hosts (animal) depriving them of the same nutrients and causing severe organ damage, failure and death (Hunter, 1994; Hunter, 1996).

Ascites, for instance is a disease condition manifested by accumulation of fluid in the abdominal or peritoneal cavity. It is known to result from stasis or obstruction of portal circulation, reduced removal of fluid from the body, increasing permeability of tissue to both fluid and protein resulting in extreme protein loss and consequently nutritional deficiency or hypoproteinemia. Bacteria, viruses and parasites are also incriminated in the cause of ascites (Ritchie et al, 1994).

The presence of large volume of fluid in the peritoneum is evident by a distention of the abdomen, labored breathing (dyspnea) due to intra-abdominal pressure, weakness and death. The serious consequences of ascites necessitate an overview of this disease condition. The aim and objective is to determine the prevalence of ascites in dogs and to highlight further area of research.

MATERIALS AND METHODS

Data and dogs presented with a history of ascites in some selected Vet. Clinics in Jos Metropolis from 1997 to 2001. The diagnostic methods include clinical examination, palpation, auscultation and abdominocentesis for evidence of fluid accumulation in the peritoneum.

RESULT AND DISCUSSION

TABLE: SHOWING THE PREVALENCE OF ASCITES IN LOCAL AND EXOTIC BREED OF DOGS IN JOS METROPOLIS.

		LOCAL (BREED) DOGS				EXOTIC (BREED) DOGS			
Year	Number presented	Male	Female	Adult	Puppy	Male	Female	Adult	Puppy
1997	16	4	5	6	3	1	6	6	1
1998	22	3	7	8	2	4	8	10	2
1999	30	2	7	6	3	11	10	15	6
2000	11	1	2	2	1	1	7	7	1
2001	17	3	4	5	2	2	8	7	3
Total	96 (%)	13 (13.54)	25 (26.04)	27 (28.13)	11 (11.46)	19 (19.79)	39 (40.63)	45 (46.88)	13 (13.54)

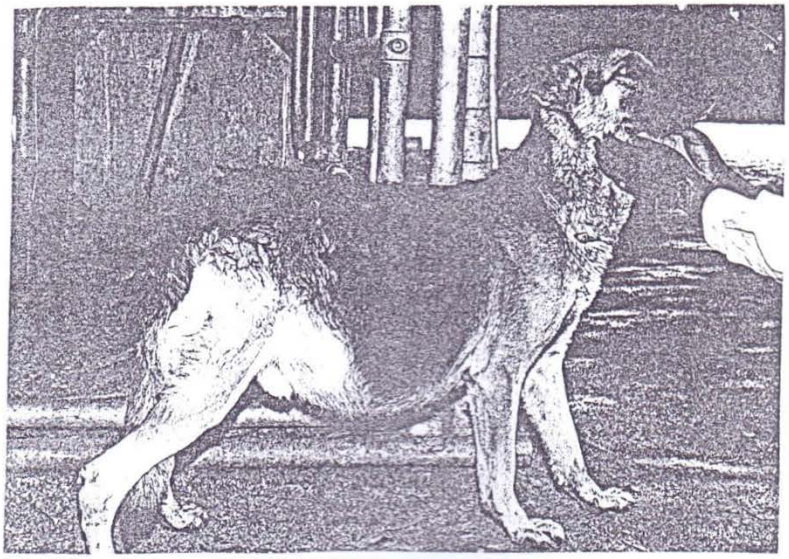

Fig. 1: Showing an Exotic breed of dog with ascites, (abdomen with fluid accumulation and distention).

The result showed that a total of 96 dogs were presented with ascites during the period of study; out of which 38 (39.58%) are local dogs and 58 (60.42%) are exotic breed of dogs. This reveals that both local and exotic dogs are susceptible to this disease condition. However, the local dogs are less prone maybe due to their hardy nature to harsh environmental stress factors and the management practices. The result further revealed that more females (64) are affected than the males (32) representing 66.67% and 33.33%, respectively as shown in the table. Also, more adults, 72 (75.01%) are infected than the young puppies, 24 (25.00%); where the local males are 13 (13.54%), local females 25 (26.04%) and local adults 27 (28.13%), local puppy 11 (11.46%), while the exotic males are 19 (19.79%), exotic females 39 (40.63%), exotic adults are 45 (46.88%) and exotic puppies are 13 (13.54%) as shown in the table.

It appears this disease syndrome has age and sex susceptibility and occurs at all period of the year. In a separate study by Datong (2003), a high infection rate (276 cases) was reported from 1995 - 2002 where more female and adult dogs were recorded than the males and the puppies. Most of the dogs in the study area are kept under poor management (housing, feed and feeding, etc.)

Dietary deficiencies, bacteria, virus and parasites are known to cause ascites. Excessive water retention (diminished removal or excretion) also contributes (Gourley and Vasseur, 1985; Ritchie et al. 1994). The inability of patients debilitated by disease to excrete water load may be related to excessive sodium retention by the kidney (proximal tubules). Feed (nutrition), feeding, infectious diseases and parasites (ecto and endo) are among the factors causing debility of animals. Liver disease, hypoalbuminemia, low environmental temperature and high sodium diets have been associated with heart failure and ascites (Ritchie et al, 1994).

CONCLUSION

Undoubtedly, prevention is better than cure. This statement underscores the need for proper management of dogs to attain healthy condition. The need to provide adequate management in relation to other medical investigation and treatment can not be over emphasized. Feeding for instance is one of the most important management practices of the dog owner. However, most questions asked by dog owners and breeders are: what type of food and how much quantity to feed? Type and feeding should be based on energy need, growth, work, reproduction, body weight evaluation and other existing physiological and pathological conditions.

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