## Basrah J. Vet. Res., 1: 1& 2. (2004). 59-64.

#### A SURVEY ON INTESTINAL HELMINTHS OF DOGS IN BASRAH

Suzan A. A . A . AL-Azizz

Dr. Awad, A.H.H.

**Department of Microbiology** 

**Department of Biology** 

**College of Veterinary Medicine** 

college of Education

**University of Basrah** 

**University Of Basrah** 

#### **Abstract:**

Between October (2002) and March (2003), (30) dogs collected In Basrah city, were examined for intestinal helminthes . Six helminthes species (3 cestodes and 3 nematodes) were found . the prevalence and intensity of all these helminthes species were also recorded here.

# **Introduction:**

It has been estimated that over (30) diseases (Bacterial, viral, Parasitic and Fungal) transmitted to man were Pet-associated (1). The most common parasites which infect dogs in the world are round worms and tap worms (*Toxocara canis*, *Toxoascaris leonine*, *Dipylidium caninum*). Round worms are passed from dog to dog via eggs and larvae in their faces. These eggs and larvae can live in the soil for several months or even years. The dog picks them upon it's coat, pows and muzzle and then ingests them while grooming (3). Parasites such as *Toxocara sp.*, *Ancyloxtoma sp.*, *Trichurs sp.*, *Dirofilaria immitis*, *Dipylidium caninum* have all been found in man (4). Hook worms and ascarids of dogs and cats affect animals throughout the world contaminating the public places and subsequently

# Basrah J. Vet. Res., 1: 1& 2. (2004). 59-64.

infections either with cutanous larvae migrans caused by *A. caninum* and *A. brazileinasis* (5) or with visceral and ocular larvae migrans caused by T. canis (6).

This survey as undertaken to examine the presence and intensity of helminth parasites in the intestine of dogs in Basrah.

#### **Materials and Methods:**

During the period from October 2002 to March 2003 a total of (30) stray dogs were killed by using strygnine tablets in Basrah city. The abdomen of these dogs were dissected, the intestine was taken out after cutting from both ends (stomach to the end of rectum), then was put in dissecting dishes and cut lengthwise. Big worms that can be to seen by eye were picked up. The intestine lining was stripes out to collect the small worms under dissecting microscope, worms were fixed in 10% formalin. The isolated worms were classify according to (7 and 8).

## **Result:**

Generally, the percentage infection of dogs with helminthes ranged between 20% in October to 80% in February (table1). The percentage infections of cestodes, nematodes and double Infections were 16.6,20 and 13.3% respectively (table2). The high number of nematode worms that infected dogs was *T. leonine* (14), and the lowest *T. canis* (2), while in cestoda a high Number of worms is *Echinococcus granulosus* (7) and the lowest *D. latum* (3). The total intensity of infection was (3): cestodes (1) and Nematodes (2) (table3).

Table(1): showing the percentage infection of dogs with helminthes in Basrah city during the period from October 2002 to March 2003

Month	No. of dogs	No. of dogs	%Infection	
	Exam.	inf.		
October	5	1	20	
November	5	2	40	
December	7	3	42.8	
January	4	2	50	

# Basrah J. Vet. Res., 1: 1& 2. (2004). 59-64.

February	5	4	80
March	4	1	25
Total	30	13	43.3

Table(2): Showing the single and double infections of dog in Basrah with helminthes during the period from October 2002 to March 2003.

cestodes		nematodes		Double infection					
Month	No.of dogs exa.	No.of dogs inf.	%Inf.	No.of dogs exa.	No.of dogs. Inf.	%inf	No.of dogs exa.	No.dogs inf.	%inf.
October	5	1	20	5			5		
November	5	1	20	5	1	20	5	2	40
December	7		_	7	3	42.8	7		
January	4	2	50	4			4		
February	5	1	20	5	1	20	5	2	40
March	4			4	1	25	4		
Total	30	5	16.6	30	6	20	30	4	13.3

Table (3): showing the mean intensity infection of dogs with Cestodes and nematodes in Basrah.

Cestodes	No.	Nematodes	No.
D. latum	3	T. canis	2
D. caninum	6	T. leonine	14
E. granulosus	7	A. caninum	4
Total	16	Total	20

## **Discussion**

Parasites can cause serious problem for all animal species. Some parasitic worms can spread from animals to human like round worms in dogs (9). The total percentage infection in the present study ranged between (20-80%) in months study.

High percentage infection of dogs with parasitic nematode was reported in United Kingdom (6). About 43%, 25.7% of dogs were infected with T. canis, 2.8% infected with T. Leonina and 11.4% infected with A. caninum in Mosul city (10,11).

In Najaf region it was reported that 46% of dogs infected with T .canis (12). In Beigium study on dogs revealed that 17% were infected with T. canis and 10% were infected with T. leonina (13) . In Basrah the percentage infection of dogs in urban region was (33.3%). While in rural was (37%) (14) .He noticed that a percentage infection in cooled Months was higher than in hot months , moreover , he reported a 23.5% with A. caninum.

#### References

1-Srech, G. K. and Smith. H. (2000). Pest, Poop and parasites. Micro. Today. 27;

84-85

2-Tietze, P.E. and Tietze, P.H. (1991). The round worm , Ascaris lumbricoides.

Prim. Care., 18 (1); 25-14.

3-Public health service., (1998). Parasitic round worm diseases. NIAID fact

Sheet.4-Robert, L.S. and Jr. J.J (1996). Foundations of Parasitology. fifth edition.pp;659

5-steel, J.N., (1982) HAND BOOK series in Zoonoses :parasitic zoonoses flurida .C.R.C Inc.: 205-219

- 6-Glickman, L.T. and Shantz, P. M.(1981) Epidemiology and pathogenesis of zoonotic toxocariasis Epi.rev.,3:2030-250
- 7-Yamaguti, S. (1959). Systema helminthum, V.II: the cestodes of vertebrat inter Sci. pubi., new york .Pp:860
- 8-Yamaguti, S. (1961). Systema helminthum V.III: the nematodes of vertebrat part I+II .inter Scipubi., new york Pp:1261
- 9-Fedesa, D. (2001). Companion animals today keeping parasited at by home intrnet 10- Abul-Eis, S. E. (1993). Cited by Al-emara G.Y.(1999). Epidemiologyical study of nematode in digestive of dogs in Basrah city. M. Sc. thesis Coll. Vet . Med. Univ. of Baghdad.
- 11-Al-khalidi, N.; Daoud, M. S.; Shubber, A. H. and Al-alousi, T. T. (1983). A survey for internal and external in dogs in mosul (Iraq). Iraq J. Vet .Sc.,1(1-2).
- 12-Sultan, B. I. (1997). Epidemiological study of *Toxocara canis* in najaf region ph. D thesis Coll. Vet. Med. Univ. Baghdad.
- 13-Gerln G., Penchener, M. and Gian, H. (1980). Frequency of intestinal parasites among carnivores (cats and dogs in Belgium) ann de med vet 124(2):133-136 14-Al-emara G. Y. (1999). Epidemiological study of nematode in digestive of dogs in Basrah city. M. SC. thesis Coll. Vet. Med. Univ. of Baghdad.

# مسح للديدان المعوية في كلاب محافظة البصرة

د . عبد الحسين حبش عواد قسم علوم الحياة كلية التربية جامعة البصرة

سوزان عبد الجبار عبد العزيز فرع الاحياء المجهرية كلية الطب البيطري جامعة البصرة

# الخلاصة:

للفترة من تشرين الأول (٢٠٠٢) واذار (٢٠٠٣) تم فحص امعاء (٣٠) كلبا في مدينة البصرة بحثا عن الديدان المعوية . لوحظت (٦) انواع منها (٣) انواع من الديدان الشريطية و(٣) انواع من الديدان الخيطية . حسبت نسبة وشدة الاصابة لجميع الديدان في هذه الدراسة .