

Epidemic survey for infection by both types of intestinal Parasites in Baghdad AL- Karama hospital patients.

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الخلاصة:

تتضمن هذه الدراسة مسح لنوعين من الطفيليات المعوية الممرضة للانسان (المتحولة الحالة للنسيج والجيارديا اللامبيلية) والتي تنتشر بين سكان محافظة بغداد من مراجعي مستشفى الكرامة للفترة من كانون الثاني 2002 ولغاية كانون الاول 2005 وباستعمال طريقة الفحص المباشر لعينات البراز وبلغت 6239 عينة .

سجل معدل الخمج بهذين الطفيلين (14.71%) كما كان اكثرها انتشارا المتحولة الحالة للنسيج بنسبة 12.79% اما الجيارديا الامبليا فكانت بنسبة 2.55% وقد سجلت نسب متقاربة لخمج الذكور والاناث (14.84%) و (14.57%) على التوالي كما سجلت اعلى نسبة تبلغ 24.35% للخمج في سنة 2003 واقل نسبة في سنة 2004 تبلغ 10.77%.

Abstract:

objective The of this study includes surveying for two types of intestinal parasite that causes humans disease (*Entamoebahistolytica* and *Giardia lamblia*) which spread among Baghdad governorate people from AL-Karama hospital patients during the period from January 2002 till December 2005 using the method of direct test to 6239) stool sample. The average of the infection registered for both parasites is 14.71% and, most of them was *Entamoebahistolytica* 12.71%. while *Giardia lamblia* was 2.55% and approximate the percentage of the male and female infection 14.84% and 14.57% respectively and higher percentage of infection was registered at 2003 24.35% and less percentage at 2004 70.77%.

Introduction:

The infection of intestinal parasite is one of the most familiar in the outgrowth countries its negatively effects on the feed and healthy case of human ^[1]Some of the intestinal parasites cause sudden and acute diarrhea continues for many days as in cases of *giardiasis* and *amoebiasis* ^[2]The intestinal parasites may be caused anemia and a different grade of malnutrition ^[3]The first who made study deals with spreading the infection with the parasite in Iraq and mentioned in it the

result of 1000 sample stool or patient from Baghdad, Diyala and AL-Anbar governorates^[5], followed in three studies^[6,8], and then, the epidemic surveying studies followed from its, some of its accomplished among the primary studies^[9,12] Some of these studies accomplished among the hospitals outpatients or healthy centers^[13,15].

Another studies were complete among the different levels of society, but the immediate study unique that it tries to compare the spreading of the parasitic infection which is *amoebiasis* and giardiasis during the last year of the economic sanction continue to the Gulf war year 2003 then the two following years after the war. stool examination about 1000 stool samples from patients in Baghdad, Diyala and Al-Anbar governorates^[5] followed in three studies^[6,8] and then the epidemic surveying studies followed from its accomplished among the primary. The aim of the present study was to investigate the epidemic survey of the infection of both types of intestinal parasite in Baghdad AL-Karama hospital's patients.

Materials and methods:

Used direct smear method to examination (6239) persons stool of AL-Karama hospital- Baghdad in both sex from January 2002 till December 2005.

Results:

Results of this study appeared in 6239 case of infection for the tested persons, 486 from male and 432 were females (Table-1) as shown there are no differences between the percentage of male and female infection in all the four years. The total percentage specified of *amoebiasis* and giardiasis is 14.71% and the no. of infection with first parasite was higher than the while the second were 798.159%, respectively. The higher percentage of *amoebiasis* on 2003 was 22.72% but the least percentage was in 2002 about 9.45% as reported in (Table - 2) .The higher percentage was on 2004 about 0.69%, and the higher percentage was on both parasites on 2003 was 24.35% and least percentage was on 2005 about 10.19% (Table -2) from its appeared that percentage of the single infection was 14.35 but the double infection percentage was 0.37%.

%	No.of infection	No.of Tested	%	No.of infection	No.of Tested	%	No.of infection	No.of Tested	year
14.14	226	1598	13.41	103	768	14.82	123	830	2002
24.35	344	1413	23.32	163	699	25.35	181	714	2003
10.77	186	1727	10.75	84	795	10.94	102	932	2004
10.79	162	1501	11.68	82	702	10.01	80	799	2005
14.71	918	6239	14.75	432	2964	14.82	486	3275	TOTAL

Table-1: Total infection in both intestinal parasites percentage according to sex and year.

%	NO.	%	NO.	%	NO.	Year
14.14	226	5.01	80	9.45	151	2002
24.35	344	3.75	53	22.75	321	2003
10.77	186	0.69	12	10.19	176	2004
10.79	162	0.93	14	9.99	150	2005
14.71	918	2.55	159	12.79	798	TOTAL

Table-2: The infection of both intestinal parasites and its percentage in each year.

%	NO.	%	NO.	%	NO.	Infection type
14.35	895	14.24	422	14.44	473	Single
0.35	23	0.34	10	0.40	13	Mixed
14.71	918	14.57	432	14.84	486	TOTAL

Table-3: The single and mixed infection of intestinal parasites type in the general four years.

Discussion:

This study showed the total infection percentage in both intestinal parasites among AL- Karama hospital outpatients reach about 14.71% its less than results were registered among Arbil governorate children hospital about 21.6 %, ^[14]. And about 20.1 % registered among new birth in Diyala governorate ^[16] that may be related to the bad situations of healthy and services in Iraqi governorate compared with Baghdad during the economic sanction (Table-1) which confirm this opinion, the appearance of higher percentage of infection on 2002 about 14.14 % compared with other years 2004-2005 between 10.77% and 10.79% except 2003 which was 24.35% . That was related to the extraordinary situations that our country passed on that year which reflected negatively on all life levels.

The same table also appeared that there are no differences among the total infection percentage of male female in any year of years or in all years generally

that makes believe the main reason was the contaminated drinking water with both intestinal parasites and this result is agreeing with ^[12].

This study specialized in both parasites, *Entamoeba histolytica* and *Giardia lamblia* (Table-1). The first parasite appeared in total infection percentage was 12.79% and it's less than was registered 18.15%, ^[14] and 13.6% ^[16], when the registered percentage was 4.1% was higher than in Arbil ^[14] General healthy problem in all over the world specially in third world country ^[17] The *Entamoeba histolytica* may be causes diarrhea as well as liver faster, lung and brain if it reached these member ^[18]. This parasite registered nearing percentage during the immediate study years except the year 2003. The total infection percentage of Giardiasis reached 2.55 % it's less than result recorded about 10.9% by ^[13] and 11.9% recorded by ^[16]. The study appears higher percentage of infection in this parasite appeared between 2002 and 2003 were 5.01% and 3.75 % that confirms the reasons that we mentioned, and what is certify that the infection percentage by this parasite become less when the necessary time of drinking water treated by the chlore increased and using filters that covering the way of parasitic cyst ^[1]. The percentage of single intestinal parasite infection was the greatest than 14.35% (Table-3) with the double parasitic infection is widely less 0.375% while (Table -3) this because the acquirement person by one of these parasites gets immunity against the second parasite ^[16].

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AJPS, 2011, Vol. 9, No.1

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