53 - EPIDEMIOLOGIC STUDY OF CONFIRMED CASES OF LEISHMANIASIS IN HUMANS IN THE AREIA CITY - PARAÍBA BETWEEN 2010 AND 2011

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INTRODUCTION

Leishmania is a parasitic disease caused by protozoa of the genus Leishmania, being transmitted through females insect Phlebotomine (already infected) in the moment of her feeding by the blood meal, and is considered a typical zoonosis (SPYRIDES et al., 2010).

In the American continent, the disease is classified clinically in American Cutaneous Leishmaniasis (ACL) and American Visceral Leishmaniasis (AVL) (Coelho, 2010). Brazil represents about 90% of cases of Leishmaniasis in Latin America, according to Souza (2010) the disease expands mainly in the peripheries of the country, being characteristically endemic in populations of poor social level, in conditions of precarious home, so, in that way, including in the circle of neglected diseases.

The Ministry of Health between 2001 and 2010 punctuated 35 thousand cases of AVL in Brazil, of this total, 55.1% are represented by Northeast region. Inserted in this wide and problematic spectrum which public health is, the city of Areia - Paraiba, with an estimative of 23.391 habitants, it is an area considered endemic and presents all the factors favorable to the appearance and propagation of the disease, such as climate, Phlebotomic fauna, geographical characteristics, vegetation profile and the triad of the transmission chain.

Considering the endemic potential for Leishmaniasis in Areia - PB, the objective of this study was based in the rising of Leishmaniasis confirmed cases in the city of Areia – PB, between the years 2010 and 2011, for application of qualitative questionnaire, with the purpose of proceed the epidemic investigation.

METHODOLOGY

Confirmed cases were collected through the information database from the SUS Department of Informatics (DATASUS) and medical records and notifications books donated by Health Department in Areia – PB. Initially the project was submitted and approved by Committee of Ethics and Research (Comitê de Ética e Pesquisa - CEP) from Universidade Estadual da Paraíba (UEPB), with CAE: 09859112.0.0000.5187.

After identification of 13 patients with Leishmaniasis, they were visited and signed the consent form (TCLE). Then a qualitative questionnaire was applied for verification of the demographic and epidemiological information which were submitted to the population in study, as the social conditions of housing, patients' life quality, environmental profile, geographic, age group and the efficacy of treatment administered.

RESULTS AND DISCUSSION

The data collected after evaluating the medical records and notifications books donated by Health Department in Areia – PB during the period 2010-2011 for the identification of positive cases of Leishmaniasis are represented in the Illustration 1.

Were reported thirteen (13) cases of ACL only to the cutaneous form of the disease, during the analyzed period, being the year 2010 the period of greatest notification with a representation of 10 (ten) positive cases, and 2011 with 3 (three) (confirmed cases) with the pathology.

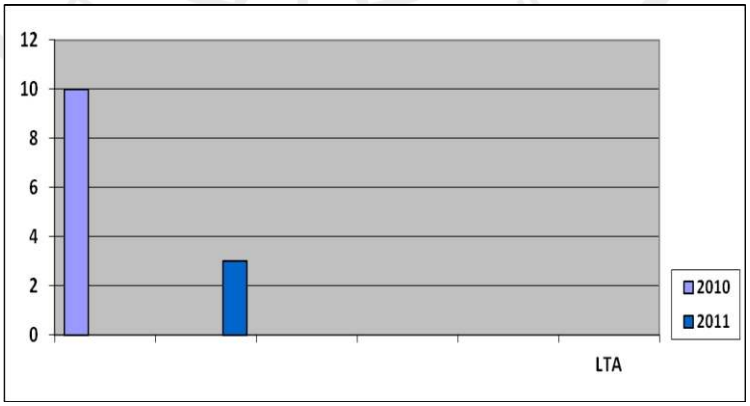

Illustration 1. Number of cases (axis Y) American Cutaneous Leishmaniasis (ACL) notified in the period from 2010 to 2011 in the city of Areia – PB.

A gradual decline of the leishmaniasis cases is observed around 53,84%, in the respective interval between 2010 and 2011, this could indicative actions the disease control in the community or a probable seasonal characteristic of the pathology.

According to Miranda et al (1996) and Camargo et al (2002) the distribution of Phlebotomines is quite influenced by climate, food source, secondary vegetation among several other factors, since there are no reports or traces of prophylactic programs in the universe studied. According to the data presented in DATASUS site there are continuous elevation and alternate reduction of cases in previous annual periods.

The results obtained after application of the questionnaires containing the information demographic and epidemic were represented in the Illustrations from 2 to 6.

In the Illustration 2, the 13 bearers of leishmaniasis were distributed in a proportion of 53,84% for the urban area and 46,15% for the rural.



Illustration 2. Distribution for Leishmaniasis areas in Areia – PB, in the period from 2010 to 2011.

During the studied time, the urban area had a representation mit notifications number more larger than the rural area, suggesting a disordered growth of the urban perimeter, with the growth of irregular homes with urban agglomerates, accentuating the growth of areas periurbanas, occupying deforested areas of vegetations before wild.

It is evident from the sharp extent of pathology cases in the urban área and the relation between society and space of one of the leishmaniasis forms (cutaneous) with the poor situation of the communities affected.

A considerable sample of homes visited was in state precarious housing and all close or inserted in the woods, with areas of extensive deforestation due to human action for human occupancy are represented in the Illustration 3, where 8 (61.53%) lived in houses mit stucco, 12 (92.30%) houses were inserted in deforested areas and all houses had the presence of domestic dogs living free.

Variables	N º	%
Houses with stucco	08	61,54
Houses without stucco	05	38,46
Inserted in the deforested area	12	92,30
Agglomerates humans	08	61,53
Presence of domestic dogs	13	100,00

Illustration 3. Profile Socio-spacial of the communities affected by Leishmaniasis from 2010 to 2011, obtained from the 13 cases reported.

The resulting profile suggests to be one of great causes for proliferation of the vector and disease transmission in the home space or near theses houses. The communities with diseases registration showed a considerable agglomerate of people, added the existence of domestic dogs (some with clinical lesions suspicions for Leishmaniasis) and a precarious condition of basic sanitation.

According Ximenes et al (2007) and Costa (2005) these factors allow the adaptation of the insect diseases transmitter in the urban environment, seeking diverse food sources, including man; increasing urbanization of the disease. To notable relations of the cases registered with the precarious situation life and the sanitation deficiency in the affected communities are clearly verified, that result is concordant with Vanzeli (2007). That found in a similar study a higher distribution of disease cases in communities with precarious and illegal small house, in deforested areas and with scarce sanitary services.

The Illustration 4 show the distribution of the Leishmaniasis bearers, identified through the spreadsheets by age group, where the most affected were individuals with age among 09 (nine) to 88 (eighty eight) years old, with clinical characteristics varied and a larger number of cases among men than women. The population in this study has the school instruction degree - low with 6 (46.15%) illiterates.

Variables	Education degree	
	N°	%
Complete Fundalmental	03	23,07
Incomplete Fundalmental	04	30,76
Illiterate	06	46,15
	Gender	
	N°	%
Male	09	69,23
Female	04	30,76
	Age group	
	N°	%
09 -25	05	38,46
47-67	05	38,46
82-88	03	23,07

Illustration 4. Distribution of 13 cases registered in patient with Leishmaniasis for age group, gender and education degree.

In relation with the Illustration 4, a larger amount of cases among males than females may reflect a relations with the type of activity laboral, turning the body more exposed to contact with the vector of the disease, as the work in the field. The low degree of school instruction answers the decadence of the community's education that answered not to obtain knowledge aspects of the disease, as the relations with the environment and infection mechanisms. Corroborating mit the accentuated growth of the number of cases, delaying the diagnosis and the treatment.

Observing the Illustration 5, the poor situation in the communities affected , imposes the condition of being the portion of the population that represents the largest number of notifications of the disease. According to Rodrigues (2012) the Leishmaniasis problem among the population continues in a certain way, neglectful, appearing almost exclusively in poor communities, with deficient level of basic sanitation and economic situation. Getting recorded the relations between the cases with the precarious life of the universe studied in the sample.

According to the questionnaire, the sanitary profile in the communities studied shows in certain way, insufficient not satisfying the need for population demand, as demonstrates the Illustration 5.

Variables	**Sanitary Sewer**	
	N°	**%**
Public Service	07	53,84
In the open sky	04	30,76
Others	02	15,38
Variables	**Garbage Destination**	
	N°	%
Public Service	07	53,84
Others	06	46,15
Variables	**Water supply**	
	N°	**%**
Public	**07**	**53,84**
Others	**06**	**46,15**

Illustration 5. Basic sanitation service profile of the communities studied, extracted of the 13 cases obtained.

Between 2010 and 2011 were reported thirteen (13) cases of American Cutaneous Leishmaniasis (ACL) only for the cutaneous form of the disease, affecting upper and lower limbs separately, of which 2 (15.38) resulted in deaths as shown the Illustration 6.

Clinical Dates	**N°**	**%**
Lower limbs	09	69,23
Upper limbs	04	30,76
Deaths	02	15,38
Cutaneous ulcers	13	100

Illustration 6. Manifestation and clinical consequences of ACL in the population analyzed.
LL: Lower limbs UL: upper limbs

In the results presented in the Illustration 6, there is the occurrence of two deaths senior patients and residents in the periphery of the city. With regard to deaths, according to responsible relatives (because there was no access to the reports of death), the cause of this event was due to physiological fragility, secondary infections, intolerance to therapy, imposed by the organism; fatiguing the patient to the point to abandon treatment, making them susceptible to complications. Albuquerque (2010) affirms that the disease, even with their pathological mechanisms and therapeutic control elucidated, can yet cause deaths and recidivism, if there are compromising of the immune defense of the sick and retarded or irresponsibility in the diagnosis and therapy of the disease, being these part the health professionals and patient.

The data presented by the bearers of that illness (Illustration 6) are concordant with the effective literature (RODRIGUES, 2012; WERNECK et al. 2011), because the drugs used in the therapy of ACL has considerable toxicity power and adverse reactions, being able to these have also contributed to occurrence of this fact.

According to Ximenes et al (2007) and Costa (2005) even that consequence type, be part of the adverse effects of the therapy or bad conduct of the patient front to the therapeutic regimen, It is necessity other researches that approach with details that theme, the region in the rankings of the most affected.

CONCLUSION

The result, after application of questionnaires to 13 Leishmaniasis bearers (ACL) reported in the city Areia – PB, allow to concluded that it is of necessity extreme the elaboration of public politics of health and education, that establish prophylactic means (mainly the information) and curatives that may be directed to improving the quality of life of the poor contingent, which represents large fraction of society, threatened and affected by the consequences of social inequality and economic means.

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EPIDEMIOLOGIC STUDY OF CONFIRMED CASES OF LEISHMANIASIS IN HUMANS INTHE AREIA CITY – PARAÍBA BETWEEN 2010 AND 2011

ABSTRACT

Leishmaniasis constitutes a public health problem due to the incidence, the wide geographical distribution and the presence of disfiguring sequels, destructive and disabling the disease provokes in the man, especially in populations of poorer areas and with precarious basic sanitation. Considering the endemic potential of the city Areia - Paraiba for leishmaniasis, the study had as objective to do a rising of leishmaniasis cases confirmed in the city between the years 2010 and 2011. The data were collected through the information database from the SUS Department of Informatics (DATASUS) and medical records and notifications books donated by Health Department in Areia – PB. After identification of the bearers, they were visited for applying a qualitative questionnaire for verification of the information demographic and epidemiological which are submitted to the population in study. Was notified thirteen (13) cases of leishmaniasis, only for the cutaneous form of the disease (ACL), being the year of 2010 the period of larger notification registered representativeness of ten (10) cases positivized and 2011 with three (03) registered cases of the pathology, with a decline around 53,84%, in the respective time interval. A percentage of 15,38% of the notifications arrived to death and 84,61% obtained the regression and cicatrization of the ulcers. The distribution of the disease population zone showed reasonably homogeneous, with a proportion of 53,84% for the urban and 46,15% for the rural. The disease manifested most frequently in the men (69,23%) than in the women (30,76%) where the population interviewee presented very low education degree (46,15%) of illiterates; was also verified a considerable agglomerate of people added to the existence of domestic dogs, precarious houses near or inserted in the woods, with sanitary spilling to open sky or sewage box.

KEYWORDS: Leishmaniose, compulsory notification, epidemiology.

ÉTUDE ÉPIDÉMIOLOGIQUE DES CAS CONFIRMÉS DELEISHMANIOSE CHEZ L' HOMME DANS LA VILLE DE AREIA-PARAIBA ENTRE 2010 ET 2011.

RESUMÉ

La leishmaniose est un problème de santé publique en raison de l' incidence, de la répartition géographique et de la présence de conséquences défigurantes, destructrices et invalidantes qui la maladie provoque chez l' homme, surtout dans les populations des zones les plus pauvres et avec des mauvaises conditions hygiéniques. Considérant le potentiel endémique pour la leishmaniose de la ville de Areia -Paraiba, l'étude visait à étudier les cas confirmés de leishmaniose dans la ville entre les années 2010 et 2011. Les données ont été recueillies dans le cadre de la base de données du Département d'Informatique de l' SUS (DATASUS) et des dossiers et cahiers de notifications donnés par le département de santé de la ville en étude. Après l' identification des porteurs, ils ont été visités pour l'application d'un questionnaire qualitatif d'enquête sur les informations démographiques et épidémiologiques qui ont été soumis à la population de l'étude. Seulement treize (13) cas de leishmaniose ont été notifiés pour la forme cutanée de la maladie (LTA), l'année 2010 étant la période avec la plus élevé notification enregistrée avec dix (10) cas positivisée et le 2011 avec 03 cas recensés de la maladie, avec une décroissance autour de 53,84 % dans l'intervalle de temps respectif. Un pourcentage de 15,38% des cas est venu à la mort et le 84,61 % a obtenu la régression et la guérison des ulcères. La répartition de la population de la zone de la maladie se montra assez homogène, avec un ratio de 53,84 % pour les zones urbaines et de 46,15% pour les rurales . La maladie se manifeste plus souvent chez les hommes (69,23 %) que chez les femmes (30,76 %), où la population interrogées avaient un niveau d'éducation très faible (46,15% d' analphabètes); également il été trouvé un rassemblement considérable de personnes additionné à l'existence des chiens domestiques, les ménages existants près ou insérés dans les bois, avec les toilettes de dépotoir à ciel ouvert ou dans une fosse .

MOTS-CLÉS: la leishmaniose, la déclaration obligatoire, de l'épidémiologie.

EPIDEMIOLÓGICA ESTUDIO DE CASOS CONFIRMADOS EN LEISHMANIASIS HUMANOS DE LA CIUDAD DE AREIA – PARAÍBA ENTRE 2010 Y 2011

RESUMEN

Resultó ser bastante homogénea con una proporción de 53,84% para las zonas urbanas y el 46,15% para la rural. La enfermedad se manifiesta con mayor frecuencia en los varones (69,23%) que en las mujeres (30,76%) donde la población entrevistada tenía nivel educativo muy bajo (46,15%) de analfabetos También se verificó un grupo significativa de personas además de la existencia de los perros domésticos, casas existentes cerca o insertados en el bosque, con descarga La leishmaniasis es un problema de salud pública debido a la incidencia, la distribución geográfica y la presencia de secuelas

desfiguración, destrucción y enfermedad discapacitante que causa al hombre, sobre todo en las poblaciones de las zonas más pobres y malas condiciones sanitarias. Teniendo en cuenta el potencial de la ciudad endémica de Areia - Paraiba para la leishmaniasis, el objetivo del estudio fue examinar los casos confirmados de leishmaniasis en la ciudad entre los años 2010 y 2011. Los datos fueron recolectados a través de la base de datos de información del Departamento de Informática del SUS (DATASUS) y libros y registros y notificaciones donados por el departamento de salud de la ciudad en estudio. Después de la identificación de los portadores, que fueron visitados por la aplicación de un cuestionario cualitativo para investigar las socios información demográfica y epidemiológica que fueran presentadas la población de estudio. Notificado a trece (13) casos de leishmaniasis sólo para la forma cutánea de la enfermedad (LTA), siendo el año 2010 el período de mayor notificación representante registrado con diez (10) casos positivizado y 2011 con 03 casos registrados de la enfermedad, con un decaimiento alrededor 53,84% en el intervalo de tiempo correspondiente. Un porcentaje de 15,38% notificaciones llegaron a la muerte y 84,61% obtenido regresión y la cicatrización de la úlcera. La distribución de la enfermedad por la zona por la población sanitario abierto o fosa.

PALABRAS CLAVE: leishmaniasis, la información obligatoria, la epidemiología

ESTUDO EPIDEMIOLÓGICO DE CASOS CONFIRMADOS DE LEISHMANIOSES EM HUMANOS NA CIDADE DE AREIA-PB ENTRE 2010 e 2011

RESUMO

A leishmaniose constitui um problema de saúde pública devido à incidência, ampla distribuição geográfica e pela presença de sequelas desfigurantes, destrutivas e incapacitantes que a doença provoca no homem, sobre tudo em populações provenientes de áreas mais pobres e com precário saneamento básico. Considerando o potencial endêmico da cidade de Areia-PB para leishmanioses, o estudo teve como objetivo fazer um levantamento dos casos confirmados de leishmaniose na cidade entre os anos de 2010 e 2011. Os dados foram coletados, através do banco de informações do Departamento de Informática do SUS (DATASUS) e de prontuários e cadernos de notificações cedidos pela secretaria de saúde da cidade em estudo. Após identificação dos portadores, os mesmos foram visitados para aplicação de um questionário qualitativo para averiguação das informações sócias demográficas e epidemiológicas aos quais estavam submetidos à população em estudo. Notificou-se 13 (treze) casos de leishmaniose apenas para a forma cutânea da doença (LTA), sendo o ano de 2010 o período de maior notificação registrada com representatividade de 10 (dez) casos positivados e 2011 com 03 casos registrados da patologia, com um decaimento em torno de 53,84%, no respectivo intervalo de tempo. Um percentual de 15,38% das notificações chegou a óbito e 84,61% obtiveram a regressão e cicatrização das úlceras. A distribuição da doença por zona populacional mostrou-se razoavelmente homogênea, com uma proporção de 53,84% para a urbana e 46,15% para a rural. A doença se manifestou com maior frequência no sexo masculino (69,23%) do que no sexo feminino (30,76%) onde a população entrevistada apresentou grau de escolaridade muito baixo (46,15%) de analfabetos; foi verificado também um considerável aglomerado de pessoas somado à existência de cães domésticos, domicílios existentes próximos ou inseridos na mata, com despejo sanitário a céu aberto ou fossa.

PALAVRAS-CHAVE: Leishmaniose, notificação compulsória, epidemiologia.