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Citation

Abstract
A house-to-house survey of the prevalence of leishmaniasis infection was carried out in Jos East Local Government Area of Plateau State, Nigeria. Cutaneous Leishmaniasis was diagnosed in 2.6% of a population of 703 inhabitants of the area. 18 inhabitants had the infection, which was considered to be native. 10 were males and 8 were females with age varying between 10 and 55. This area is a new focus of cutaneous leishmaniasis in Nigeria.

INTRODUCTION
Cutaneous leishmaniasis occurs mainly in tropical and subtropical Regions in various parts of the world. In the African continent, Cutaneous leishmaniasis due to Leishmania major, L. tropica. L. aethiopica is unevenly distribute from the northern to the southern areas of the continent. Northern Nigeria is one of the West African endemic Cutaneous leishmaniasis foci, especially in Sokoto, Gusau, Katsina, Maiduguri and Azare (Jelliffe 6). From this and from publications of French Workers in neighboring countries the author concluded that the endemic belt of Cutaneous leishmaniasis would appear to extend from Northern Nigeria to the north between 100 and 170 and probably much further.

The first case of Cutaneous leishmaniasis in Nigeria were reported in 1944 by Elmes and Hall4. They referred to the annual report of the medical and health services of Nigeria recording 131 cases of Cutaneous leishmaniasis and 5 case of visceral leishmaniasis, during 1924-1941, but there was no indication that these cases were parasitologically confirmed. And the authors explained that after reported attempts to confirm clinicall suspected cases of cutaneous leishmaniasis, success was achieved in 1942 when Leishmania could be seen in smears from cutaneous sores of 14 patients in Kano, but the records were lost. In 1943, the authors detected 10 parasitological confirmed cases of Cutaneous leishmaniasis, also in Kano, for which records were maintained. A further report was given by Jelliffe(6) nothing that Cutaneous leishmaniasis cases of the dry type coming to the out-patient department of Kano Hospital. Earlier on in 1977 Dedet et al.(3) referred to Owen (1930) reported a case of visceral leishmaniasis discovered in Nigeria, but the patient was a missionary continuously moving between Niger and Nigeria during six months preceding his illness.

In recent study undertaken among school children with Cutaneous leishmaniasis from Keana in the Jos Plateau, Leishmania parasite were demonstrated in 63 out of 1120 Patients examined (Agwale et al1, 2). In another studies in Kaena, 197 (3.9%) of 5,046 inhabitants had Cutaneous leishmaniasis (Ike et al5). Jos East L.G.A of Plateau State, Nigeria is being reported as a new focus of leishmaniasis

MATERIALS AND METHODS
FIELD STUDY AREA
The study area lies in the Jos Plateau in Jos East LGA of Plateau state, Nigeria, and is close to the Shere Hills. The area is in Northern Nigeria, and lies north of the Niger – Benue trough. It is more of the North Central Plateau, and it is formed on basement complex Rocks, which have produced a characteristics inselberg landscape. Angware, the area of study lies around 90N., 100 E and it is situated 50Km North East of Jos, the Capital of Plateau state. Its vegetation is generally Guinea Savanna, which consist of tall grasses and some trees. The annual rainfall of this zone is about 150cm and lasts between 6-8 months. Clinico-parasitological screening for Cutaneous leishmaniasis was conducted between the month of March – June, 1999. All the patients were interviewed and information on sex, age, residential
area and traveling history was recorded, the clinical
diagnosis of the disease was confirmed by the presence of
parasites in smears after May-Grunwald-Giemsa (MGG)
staining.

RESULTS
The proportions of people with active lesions were 2.6
(18/703) i.e. 18 individuals presented active lesions at the
time of the survey. The proportion of people found to have
scars was 2.0 (14/703). The lesions were ulcerative, volcano
sign types and wet in appearance. The number of lesions
varied between 1 and 5 (average =2). Of the 18 inhabitant
with infections considered to be native. 10 were male and 8
were females with age varying between 10 and 55 (average
= 22.7 years). There were 11 cases in children/adolescent
(10-17years) and 7 cases in adults (19 – 55 years). 4 were
housewives, 7 were pupils, 3 were students, 1 civil servant
and 1 businessman. Of the 18 natives cases, all 18 presented
lesions on the lower limb, and duration of symptoms varied
between 2 – 24 months (average = 7 months). They have
lived in this locality since birth with the exception of the
civil servant who has lived there for only 7 months. The
majority of patients were between 6 – 22 years.

DISCUSSION
Since the cases of leishmaniasis were high in this class of
individuals, this indicates that the infection is endemic in
this community (Lysenko et al7). Before now, there has been
little or no information concerning Cutaneous leishmaniasis
in this area. Angware village has a similar characteristic to
various village centers in Nigeria. Throughout the
neighbourhood there is a complete absence of basic services
such as paved streets, sewage and refuses collections.
Analysis of professional activities showed a preponderance
of low skilled manual labour and consequently a low
income. The age profile revealed a predominance of young
people in the 6 – 22 years age groups. The disease occurs in
all age groups. Despite the finding of infected children, a
good number of adult were infected which raises the
possibility of transmission occurring in the extradomiciliar
areas due to occupation activities. However, the absence of
activities related to forest areas shows that not possibly the
Cutaneous leishmaniasis in the area are not characterized as
an occupational risk of individuals who undertake work in
the forest.

The occurrence of the infection in both sexes, and without
any nearby forest areas is epidemiological characteristics
that suggest the occurrence of infection in the peridomiciliar
or domiciliar environment.

Until the present study there has been little of no information
concerning Cutaneous leishmaniasis in Agware, the data
derived from this survey not only suggests the existence of
Cutaneous leishmaniasis in the village but were also
important for the characterization of the epidemiological
behaviour of the disease in the area. The distribution by
probable date of the native cases demonstrated that
Cutaneous leishmaniasis had started to manifest itself in the
area at least 20 years ago, always in the form of sporadic
cases.

Further studies required to determine the eco-epidemiology,
including biotic factors (Flora, reservoir host, humans,
parasite) and abiotic factors (geology, pedology,
climatology). From these, it will be possible to define more
fully the transmission cycle of leishmaniasis and the factors
involved. Such information is a basis requirement for the
design of a successful control programme

ACKNOWLEDGEMENT
We thank Dr. Blaise Dondji for his guidance. Mr. Stephen
Pate (Primary Health Centre, Agware,) for his valuable
technical assistance.

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