# PROSPECTIVE STUDY AMONG CUTANEOUS IN TRIPOLI CENTRAL HOSPITAL, TRIPOLI, LIBYA

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## ABSTRACT

One hundred and ninety nine cases of cutaneous leishmaniasis were referred to Dermatology unit, Tripoli Central Hospital from 24 localities in north-west Libya during the period from September to December 1994.

Clinically most of the lesions were mutiple and distributed on the uncovered parts of the body, and the size ranged from 1 to 5 cm. In diameter. The prevalence of infection was 65. 3% among age groups 1 -30 year old. Patients responded well to the treatment with sodium stibagluconate.

## INTRODUCTION

Cutaneous leishmaniasis is endemic in north-west Libya 1. Increasing numbers of cutaneous leishmaniasis cases have been reported over a wide area south and west of Tripoli

This study describes the clinical feature sand treatment of cutaneous leishmaniasis in Tripoli Central Hospital, Tripoli, Libya.

#### MATERIALS AND METHODS

One hundred and ninety nine patients were interviewed and examined in Dermatology Unit, Tripoli Central Hospital. Biopsies from the edges of the lesions were smeared on slides fixed in alcohol, stained by using Giemsa stain. and searched microscopically for Leishmania parasites. The diameter & site of each lesion were recorded. One hundred and thirty one patients were trated with sodium stibogluconate. Lesions of the rest cases were about to heat and only treated from secondary bacterial infections.

## RESULTS

During the period from September to December, 1994, one hundred and ninety nine CL cases were referred to the Dermatology Unit, Tripoli Central Hospital from 24 localities in north-west Libya, where CL occurs with varying degrees of endemicity (Fig.I; Table I).

Twenty eight patients are living in 7 localities in the coastal area. West of Tripoli, and 171 patients in 17 localities in Jabal Nafusa (Western mountain). The duration of the disease, which was known to most of the patients, ranged from 3 weeks to 7 months. The only complaint was the appearance of skin lesions. The size of lesions varied according to their duration. Long-lasting lesions were usually large and reaching as much as 5 cm in diameter with the exception of 6cases, where the diameter was upto 7 cm. Most of the lesions were on the legs (31.2%) followed by arms (23.6%) and both arms and legs (18.1%) Lesions often associated with others on different regions of the body; 69.3% of the cases had more than one lesion (Table II). The overall male to female ratio was 1.3:

1.0. The age distribution confirmed that CL is a disease of young people, 65.3% of CL cases being observed in the age groups 1-30 years of age, with males were slightly higher affected than females, but infection may develop, however at any time from infancy to old age (Table III).

The treated patients tolerated the drug well, lesions diminished in size and finally healed.

# DISCUSSION

Those patients were considered as representative samples and did not give a real figure of the cutaneous leishmaniasis in their localities. The site and distribution of lesions in various parts of the body indicated that sandflies bite exposed skin most probably without preference. The common occurrence of multiple lesions may have been due to the probing behavior of the infected sandfly vectors. The development of lesions within 3 weeks indicated that the incubation period of Leishmania major was relatively short 2.5.

Young age groups were highly affected than old age groups, which revealed that this disease was not a new occurrence in the patients communities.

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**Table I-** Shows the 24 localities of the referred cases of cutaneous leishmaniasis to Tripoli Central Hospital, September-December. 1994

| Number                | Localities        |
|-----------------------|-------------------|
| 1                     | Janzour           |
| 2                     | AzZwia            |
| 3                     | Surman            |
| 4                     | Sabrata           |
| 2<br>3<br>4<br>5<br>6 | Al - Ajaylat      |
|                       | Al - jamayl       |
| 7                     | Kasr Ben-Ghasheer |
| 8                     | Tarhuna           |
| 9                     | Asbiah            |
| 10                    | Bani - Walid      |
| 11                    | Mizda             |
| 12                    | Bir Ayyad         |
| 13                    | Shakshouk         |
| 14                    | Al- Josh          |
| 15 v :                | ArRabta           |
| 16                    | Gharian           |
| 17                    | Kikla             |
| 18                    | AzZintan          |
| 19                    | Jadou             |
| 20                    | Yifran            |
| 21                    | Al - Haraba       |
| 22                    | Kabaw             |
| 23                    | Tamzin            |
| 24                    | Nalut             |

**Table II-** Distribution of lesions of cutaneous leishmaniasis in referred patients to Tripoli Central Hospital, September-December 1994.

| Character                             | No.         | Percentage<br>(%) |  |
|---------------------------------------|-------------|-------------------|--|
| No. of lesions at a given examination | of Patients |                   |  |
| One                                   | 61          | 30.7              |  |
| Two                                   | 48          | 24.1              |  |
| Three                                 | 39          | 19.6              |  |
| Four or more                          | 51          | 25.6              |  |
| Localization                          |             |                   |  |
| Face                                  | 22          | 11.1              |  |
| Arms                                  | 47          | 23.6              |  |
| Legs                                  | 62          | 31.2              |  |
| Trunk                                 | 7           | 3.5               |  |
| Face & arms                           | 11          | 5.5               |  |
| Face & legs                           | 14          | 7.0               |  |
| Arms & legs                           | 36          | 18.1              |  |

**Table III-** Age distribution of referred cutaneous leishmaniasis cases to Tripoli Central Hospital, September-December 1994

| December, 1994. |       |         |       |                |  |  |
|-----------------|-------|---------|-------|----------------|--|--|
| Age             | Males | Females | Total | Percentage (%) |  |  |
| 1-10            |       | 17      | 33    | 16.6           |  |  |
| 11-20           | 21    | 23      | 44    | 22.2           |  |  |
| 21-30           | 37    | 16      | 53    | 26.6           |  |  |
| 31-40           | 18    | 13      | 31    | 15.6           |  |  |
| 41-50           | 9     | 12      | 21    | 10.6           |  |  |
| 51-60           | 5     | 4       | 9     | 4.5            |  |  |
| 61-70           | 2     | 3       | 5     | 2.5            |  |  |
| 71.80           | 3     | 0       | 3     | 1.5            |  |  |
| Total           | 111   | 88      | 199   |                |  |  |

Figure I- Map of the northwestern region of Libya, showing the 24 localities of referred cutaneous leishmaniasis cases to Tripoli Central Hospital, September-December

