

CUTANEOUS LEISHMANIASIS IN AL-BADARNA : A PROSPECTIVE STUDY AMONG SCHOOL CHILDREN

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RESUME

Ce papier présente les résultats d'une étude prospective de cas de leishmanioses cutanées dans 2 écoles à Al-Badarna, durant la période allant de Juillet à Décembre 1992. Les écoliers ont été interrogés. Les cas positifs ont été adressés à l'unité sanitaire pour traitement. Parmi 260 écoliers, 22 (8,46%) se sont avérés infectés avec des lésions importantes.

INTRODUCTION

Historical records of cutaneous leishmaniasis in Libya were dated back to the 2nd decade of this century (Patane, 1928;onorato, 1931)^{1,2}. Kadiki and Ashraf (1971) recorded 40 cases in Nalut³, while Ashford and all (1976; 1977)^{4,5} recorded an increasing number of cases among settlers in new agricultural projects in Jabal Nafusa (western Mountain).

I - MATERIALS AND METHODS

Al - Badarna is a village of 1,356 of population divided into 2 parts, Al - Badarna Asshargyia and Al-Badarna Al Gharbyia, lies on the northern edge of Jabal Nafusa (Western Mountain), at an elevation of about 500 m above sea level, and is approximately 170 km southwest of Tripoli. It is semi-arid area, characterized by scattered rocky outcrops, eg: figs, almonds, palm tress, and wild herbs. Most settlers are grazing sheep and goats.

The pupils were interviewed and examined for cutaneous leishmaniasis during 3 days visit each month between July and December 1992. Biopsies were taken from the edges of suspected lesions, smeared on slides, fixed, stained by Giemsa stain, and searched for Leishmania parasites. Patients were treated with Sodium Stibogluconate.

ABSTRACT

This paper presents the results of a prospective study cutaneous liashmaniasis in 2 schools in Al -Badarna, during the period from July to,December 1992. The pupils were interviewed and examined. Positive cases were referred to the Health Unit for treatment. Of 260 pupils 22 (8.46%) were found to be infected with active lesions.

II - RESULTS

The examination of 260 pupils revealed that 16 (8,04%) of 199 pupils in the school of Al-Badarna Asshargyia were infected with cutaneous leishmaniasis, and the prevalence of infection was slightly higher among males 4.5% than females 3.5% (table I).

In Al-Badarna Al-Gharbyia school, amastigotes were detected in 6(9,84%) of pupils and the prevalence of infection was higher among females of 8,2% than males 1,64% (Table II). Most lesions were on the arms 36,3% followed by arms 31,8% and 63,6% of the lesions were multiple and ulcerative type with a diameter of 2-4 cm (Table III).

III - DISCUSSION

The infection rate 8,46% among the pupils suggested that the parasite transmission is high, but the overall prevalence of infection was 1,6% of the whole population.

This result was based on small proportion of the inhabitants, and did not give the actual number of CL cases in this area. In regard to the six ratio CL cases, the overall prevalence of infection was slightly higher among females 4,6% than males 4,0 %.

Development of lesions on uncovered parts of the body was also noted by Greffiths, (1987) and Dedet and all (1989)^{6,7}.

There is an urgent need to develop passive and active surveillance to monitor the spread of the disease.

Table I: Number of Cutaneous leishmaniasis among pupils in Al-Badarna Asshargyia School

class	Number examined	Number infected		Total
		Males	Females	
First	17	2	0	2
Second	13	1	0	1
Third	16	0	1	1
Fourth	35	0	3	3
Fifth	29	1	2	3
Sixth	22	2	1	3
Seventh	29	2	0	2
Eight	16	1	0	1
Ninth	22	0	0	0
Total	199	9	7	16

Table II: Number of cutaneous leishmaniasis among pupils in AL-Badarna Al-Gharbyia school

class	Number examined	Number infected		Total
		Males	Females	
First	11	1	2	3
Second	10	0	0	0
Third	7	0	0	0

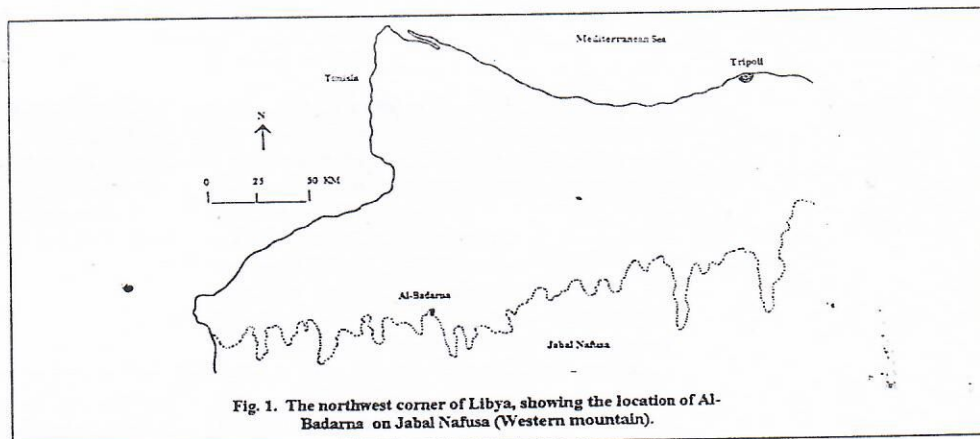
Fourth	7	0	1	1
Fifth	8	0	1	1
Sixth	-	-	-	-
Seventh	9	0	0	0
Eight	5	0	1	1
Ninth	4	0	0	0
Total	61	1	5	6

Table III: Distribution of lesions among pupils in both schools

Character	Percentage (%)
Number of lesions	
One	36.8
Two	54.5
Three or more	9.1
Localization	
Arms	36.8
Legs	31.8
Face	4.5
Arms & Legs	27.3

Carte Géographique

Fig 1. The northwest corner of Libya, showing the location of Al-Badarna on Jabal Nafusa (Western mountain).



IV - REFERENCES

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