

CLINICAL PROFILE OF CUTANEOUS LEISHMANIASIS IN FAIFA-GIZAN, SOUTH WEST PROVINCE OF KINGDOM OF SAUDI ARABIA

(A Study of 140 cases)

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A preliminary study was conducted to know the age, sex distribution and clinical pattern of cutaneous leishmaniasis (CL) in a remote hilly area, Faifa, Gizan situated in the South West region of the Kingdom of Saudi Arabia. CL accounted for nearly 5% of the new outpatient attendance in the study period (1988-90) of 20 months. Out of the 140 new patients who formed the study group, 82 were males (58.57%) and 58 females (41.43%) in the age range of 9 months to 60 years. Ninety two patients were children (65.71%) below 15 years, including 58 boys and 34 girls and CL is a major public health problem in children of this area. The fact that out of 140 affected individuals, 134 were local Saudis and 6 non-Saudis reveals the autochthonous nature of the disease in this region. The clinical spectrum included dry crusted ulcers, erythematous indurated plaques, nodules, papules, and oozing shallow ulcers. The lesions were distributed mostly on face and extremities. Response to pentostam (Sodium stibogluconate) was highly satisfactory.

Key words: Cutaneous leishmaniasis, Saudi Arabia

Introduction

Faifa is a hilly area situated 120 kms from Gizan the South Western region of the Kingdom of Saudi Arabia at an altitude of 1850m with a maximum temperature of 35°C and minimum of 10°C. Faifa General Hospital is a 50-bedded referral hospital catering to the needs of 30,000 people, mostly of Beduin tribe, scattered over several mountainous areas.

The leishmaniasis, both cutaneous and visceral forms, are clearly a significant and increasing public health problem in the Kingdom of Saudi Arabia. According to statistical data collected by the leishmania department of the Ministry of Health for the years 1978 to 1985,¹ there is great increase in number of CL re-

ported year by year, reflecting a true rise in prevalence. Total numbers in this data throughout the kingdom i.e., 13,185 in 1985, were of serious proportions. While most of the clinical data of C.L. available is from Eastern and Central Provinces^{2,3} the information about this disease from this region is very sparse. Hence this preliminary study was undertaken to know the disease pattern in this remote mountainous area.

Material And Methods

One hundred and forty new cases of CL detected among 2500 new patients with various skin diseases seen in the out patient section, formed the study group. A detailed history regarding nationality, sex, age, the nature of residence pakka or kacha, duration of the disease, site of onset, progression, previous

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treatment, presence of secondary infection, involvement of regional lymphnodes and family history of the same illness was recorded. All the patients and their family members were thoroughly examined and slit-skin smears from the edge of the CL lesions were taken. Smears were stained with Geimsa and examined for amastigotes.

Ninety-four patients with solitary skin lesions were treated with weekly intralesional pentostam (sodium stibogluconate) and 46 patients with two or more lesions with daily injections of pentostam i.m. (10gm/kg) for 10 days and weekly intralesional pentostam. All the patients were asked to attend skin out-patient department every week for follow up. This treatment was continued till the clinical lesions completely healed. All the patients were kept under monthly observation for any recurrence for 6 months after the clinical cure was obtained.

Results

Cutaneous leishmaniasis accounted for nearly 5% of the skin out-patient attendance in the study period. Of these 134 were local Saudis and 6 non-Saudis, including 2 from Yemen, 2 from Jordan and 1 each from Sudan and Somalia. All these 6 were expatriates working in this area. In one family, both the mother and her 3 year old daughter were affected. In the other, two brothers had similar cutaneous ulcers. Majority of the affected patients (51) were aged below 50. In 104, the duration of the disease was less than 5 months. The clinical features of the disease are summarised in Table 1. Ninety four patients had only a solitary

lesion. In 115 cases, skin smears were positive for "amastigotes". In 20 cases "amastigotes"

Table 1. Clinical features of 140 cases of cutaneous leishmaniasis

Sites of lesion	No. of cases	Type of lesion	No. of cases
Nose	20	Dry crusted ulcers	80
Cheeks	30	Oozing moist ulcers	44
Lips	25	Erythematous indurated plaques	4
Chin	15	Nodules	10
Upper extremities	35	Hyperkeratotic verrucous nodules	2
Lower extremities	15		

were not seen even after repeated skin smear examinations. Five patients denied consent for taking of skin smears. In 85 patients with solitary lesions who were on weekly intralesional pentostam treatment, the cutaneous ulcers completely healed after four injections without noticeable scarring.

Forty patients with multiple lesions, who were treated with I.M. pentostam (10mg/kg) daily for ten days along with weekly intralesional pentostam responded after three weeks of treatment. No recurrence was noted in them during the study period.

Discussion

In this study, C L accounted for nearly 5% of the new out-patient attendance in the study period. As a single clinical entity, this figure is very significant, though it may not represent the true incidence of the disease in the community.

Males out-numbered females in the study (58.57%) and it is reasonable to believe that the significantly less number of female cases (41.43%) is the result of the protection of the body from bites of sand-fly by traditional clothing which covers most of the body surface. C L is more common in children below 15 years, 111 patients (79.28%) out of 140 were

of this age group. So C L is a real public health problem in children of this region. Youngsters who indiscriminately play in dusty surroundings were the victims of this infection in the remote and backward area of the Kingdom. Majority of the houses are also of "Kutchra" type with improper plastering of walls and low lying windows without any mesh or mosquito nets. This type of poor housing conditions also contributes to the high prevalence of the disease in this area.

Kubba et al³ described various types of clinical lesions of C L like inflammatory nodules, ulcers, volcanic configuration, satellite papules, lymphatic subcutaneous nodules, ice-berg nodules etc.

In our study, the characteristic and common clinical lesions were dry crusted ulcers with marked surrounding induration. Muco-cutaneous lesions, particularly over the lips were seen in 25 patients, and almost all lesions were present on the exposed areas, mostly face and extremities. Regional lymphadenopathy was present in 7, whereas it was observed in 8% of patients with C L in the field study in Saudi Arabia.⁴

There are many modes of treatment currently in use; antimonials still form the basis for all forms of leishmaniasis.^{4,5} The response to pentostam used in our study is highly satisfactory and all 125 patients responded successfully to this drug. No side effects were noticed and the drug was well accepted and tolerated.

Our study may reflect the epidemiological pattern of C L in Faifa to some extent, however this needs a large scale epidemiological survey to know the exact prevalence, incidence and other aspects of this disease in this area.

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