TREATMENT OF NODULAR CUTANEOUS LEISHMANIASIS BY PENTOSTAM

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Key words: Cutaneous leishmaniasis, Pentostam, Iran

Abstract

The main object of this study was to evaluate the treatment of the patients at early stages of nodular form of leishmaniasis by intralesional injection of sodium stibogluconate (Pentostam). The study shows that the method recommended by WHO expert committee gives satisfactory results in nodular form in Iran.

Introduction

Each year there are 150,000 to 200,000 new cases of cutaneous Leishmaniasis around the world. Treatment of the infected people with the available drugs is not an easy one (1). Several thousand human cases with cutaneous leishmaniasis are reported each year in Iran (2).

Some methods have been recommended for treatment of cutaneous leishmaniasis, e.g. systemic antimony therapy, cryotherapy, thermotherapy, topical ointments containing paramomycin and methyl benzetoniom chloride, extracts of some plants etc (3). But the method of choice for treatment of nodular form is intralesional injection of pentavalent antimonial according to the recommendations of WHO expert committee on Leishmaniasis in 1989.

Materials and methods

151 patients with nodular form of leishmaniasis were given one to three ml (according to the size) of Pentostam intranodular weekly in the lesion. Maximum number of injections was four times during this therapy. Clinical

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observations were recorded weekly. The lesions were also examined parasitologically for the presence of L.D. bodies.

Results and discussion

Distribution of the lesions were 67.6% on the face , 13.9% on the hands , 4.6% on the legs , 4.6% on the ears and 9.3% of lesions were on other parts of the body (table 1).

The table shows that most patient were younger than 25 years of age. About 26% of the patients were completely cured by 2 injections. 63% by four injections and 10.6% of the treated cases had relative improvement of the lesions after 4 injections (table 2).

We selected the intralesional injection of pentavalent antimonial method and we obtained satisfactory results with VP to 4 injections. Therefore, we think the method recommended by WHO expert committee produces good results in nodular form.

Table 1- Frequency of age and location of sore.

age	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Total
Location										
Face	30	36	17	4	9	0	5	0	1	102
Ear	2	3	1	0	i	0	0	0	0	7
Hand	1	6	2	1	7	1	1	2	0	21
`Leg	i	3	0	1	1	1	0	0	0	7
Combination	2	4	1	2	4	ı	0	0	0	14
Total	36	52	21	8	22	3	6	2	ı	151

Table 2- Frequency of treated patients by location of the lesion and result of treatment.

Location	Face		Ear		Hand		Leg		Combination		Total	
Number	Nr.	%	Nt.	%	Nr.	%	Nr.	%	Nt.	%	Nr.	%
Cured by 2 Injection	8	7.8	1	14.3	4	19.1	2	28.6	1	7.2	16	0.5
Cured by 4 inJection	59	57.9	6	85.7	13	61.9	5	71.4	12	85.7	95	63.0
Relative Improvement	35	34.3	- 0	0	4	19.1	0	0	1	7.2	40	26.5
Total	102	100	7	100	21	100	7	100	14	100	151	100

References

- 1-Ministry of Health and Medical Education, Iran (1981): Leishmaniasis incidence rate in Iran, (1968-1981).
- 2-Momeni-Brujeni, A. (1994): Cutaneous leishmaniasis, Leishmania and Leishmaniasis parasite, edited by Ardehali, S.; Rezai, HR. and Nadim, A.Tehran University Press.
- 3-WHO, Technical Report Series 793 (1990): Control of Leishmaniasis.