

# ROUTINE TREATMENT OF LEPROSY WITH DDS

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A comparison is made between injections of DDS suspended in hydnocarpus esters, and DDS tablets taken orally. A comparison is also made between inpatient and outpatient treatment in 11 groups of patients over a period of 3 years, improvement being estimated by the bacterial index (B.I.). This is based on careful examination of smears from at least five smears taken from areas where bacilli were considered to be most numerous.

The results are tabulated, giving the numbers in each group (inpatients or outpatients), the weekly average dosage of DDS (injected or orally), the average initial B.I., the percentage reduction of the B.I. after 3 years' treatment, the average distance outpatients had to travel to reach the clinic, and the average interval between attendances.

## IMPROVEMENT IN THREE YEARS' TREATMENT

		Average mgm. per week				% reduction of B.I.	Average miles from clinic	Average week interval attendance	
		Number of outpatients	Number of inpatients	DDS Injections	Tablets				Initial B.I.
I.	...	28	—	159	—	4.0 to 3.1	57.6	13	2.31
2.	...	12	—	148	—	3.0 to 2.1	65.6	13½	2.5
3.	...	8	—	130	—	2.0 to 1.1	81.5	12½	3.0
4.	...	7	—	164	—	1.0 to 0.1	84.1	8½	2.5
5.	...	—	39	330	—	4.0 to 3.1	55.6	—	—
6.	...	—	14	332	—	3.0 to 2.1	72.5	—	—
7.	...	—	17	335	—	2.0 to 1.1	80.0	—	—
8.	...	—	9	346	—	1.0 to 0.1	75.3	—	—
9.	...	—	39	—	592	4.0 to 3.1	58.3	—	—
10.	...	—	12	—	627	3.0 to 2.1	54.9	—	—
11.	...	—	12	—	700	2.0 to 1.1	53.5	—	—

## Discussion

Note that the improvement in the Bacillary Index is over 50 per cent in all groups, the greatest improvements being in the outpatients (groups 3 and 4) on DDS injections, and having original indices of 2.0 to 1.1 (81.5 per cent) and 1.0 to 0.1 (84.1 per cent). The small average weekly doses in these two groups, 130 and 164 mgm., are of particular interest and the results compare favourably with group 11 where the B.I. improvement is only 53.5 per cent, although the weekly oral dosage averages 700 mgm. On the whole the improvement appears to have been more rapid under injections than under oral administration.

It should be noted that apparent improvement is slowest among the injected patients in the groups with the highest indices, namely Nos. 1 and 5, with B.I. 4.0 to 3.1. This is because these represent a massive infection, often many times that represented in 3.0 to 2.1.

The greatest contrast lies between group 7 and 12, both with an initial index of 2.0 to 1.1, the former showing an improvement of 80 per cent and the latter of only 53.5, and this in spite of the fact that the average weekly dose in the latter was nearly twice that in the former.

The average intervals between attendances of outpatients varies from 2.31 and 3 weeks, but even with the longer period an improvement of 81.5 per cent is shown.

In group 5 the average fall in the B.I. increased from 55.6 per cent at the end of 3 years' treatment to 83.6 per cent at the end of 5 years; in group 6 from 72 to 88 per cent. In group 7, 10 patients out of 17 patients had become negative by the end of the 5th year, and in group 8, out of 11 there were 6 negatives, 2 more not being available for examination, and the three others being only very slightly positive.

The number of new outpatients attending from 1949 to 1955 showed a yearly average of 709, rising from 560 in the former year to 900 in the latter, but of these 30 per cent did not return sufficiently often to benefit, while another 15 per cent were irregular in attendance.