## TEN YEARS FOLLOW UP OF TREATMENT OF LEPROSY CASES\*

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I am describing in short the follow up of leprosy cases which have been under treatment with sulphones for over a period of 10 years.

In all 120 cases of leprosy are reviewed. Out of these 71 are lepromatous, 18 tuberculoid and 31 borderline.

Treatment: The drug of choice used in the majority of these cases was DDS tablets orally while a few were given intramuscular injections of 50% aqueous solution of Sulphetrone for a few days followed by DDS tablets orally.

The commencing  $dose\ of\ DDS\ tablets$  for adults was 100 mgms. twice a week in the first month, 100 mgms. 4 times a week in the 2nd months and 100 mgms daily for 6 days per week in the 3rd and subsequent months.

The commencing dose of the Sulphetrone injection for adults was 1 cc. twice a week, increasing by  $\frac{1}{2}$  cc. every fortnight up to a maximum of 3 ccs. twice a week.

The smears for the bacteriological examination were prepared by the Section Method which invariably showed more bacilli than by the so called standard—'slit and scrape method.'

In mild reactions sulphones were continued along with special treatments for this condition. Only in severe toxic states sulphones were suspended.

Some cases had complications such as reactions and anaemia. These cases have been shown separately in the table.

Although the treatment with sulphones was spread over a period of 10 years, some cases were regular while others were less so. When the average period of treatment was 30 weeks or more in a year they are included in the regular group and when this period was less than 30 weeks in a year the cases are included in the irregular group.

The observations are summarised in the following tables.

Table No. 1: Shows Lepromatous Cases: Total No. is 71, Out of these, 25 cases had no complications while 46 had complications. Of the 25 cases without complications 16 cases were regular and 9 irregular. All the 16 regular cases improved clinically and became negative for bacilli within a period of 4 to 9 years, an average period of 6 years.

Out of 9 irregular cases. All improved clinically. 6 became negative within a period 6 to 9 years (averagh of 8 years) while 3 are still positive.

Out of 46 cases with complications, 32 were regular and 14 were irregular.

<sup>\*</sup> Paper read at the IV All India Conference of Dermatologists & Venereologists 1962, Bombay-

Out of 32 regular cases, all improved clinically. 24 became negative within a period of 5 to 10 years an average of  $8\frac{1}{2}$  years. 8 cases are still positive.

Out of 14 iregular cases, all improved clinically. 5 cases negative within a period of 6 to 8 years while 9 are still positive. 60% of lepramatous cases had reactions.

While reviewing the cases of reactions in retrospect, it seems possible that DDS which is one of the factors responsible in inducing reactions might have been administered in larger doses.

The table No. II: Tuberculoid cases: 18 cases.

This table shows the observations of the tuberculoid cases. Between 65 to 70% of the total number of cases of leprosy are of the tuberculoid type. However only few cases pursue treatment after initial improvement and less so when there are no deformities. Hence the small number of these cases, only 18 for the follow up.

Out of 18 cases, 14 were without complications and 4 had complications.

Out of 14 cases without complications, 11 were regular and 3 irregular 3 regular cases and 2 irregular were bacteriologically positive before the commencement of treatment.

All the cases improved under treatment. The 3 positive regular cases became negative within 1 and 2 years and the 2 positive irregular cases under the irregular group become negative within 1 to 4 years.

There are 4 cases with complications and all were positive before treatment. These improved clinically and became negative within a period of 1 to 4 years. It can be seen that the cases which were irregular and which had complications required a longer period to become negative than the regular cases.

The table No. III. Borderline Cases: 31 Cases.

The borderline cases which are also known as dimorphous cases occupy a place midway between 2 polar groups—the Tuberculoid and the Lepromatous. These cases are not as malignant as those of the lepromatous type and the period required for their recovery is comparatively much shorter.

In all 31 cases have been observed. Of these 15 cases had no complications while 16 cases had complications.

Out of 15 cases without complications 12 cases were regular and 3 were irregular.

All the 12 cases improved and became negative within a period of 1 to 7 years an average period of  $3\frac{1}{3}$  years was required to become negative:

3 cases in the irregular group became negative within 3 to 4 years. As this group is very small no definite conclusions could be drawn.

Cases with Complications: 16.

Out of 16 cases with complications 11 were regular and 5 irregular. All the regular cases improved and became negative within a period 2 to 7 years an average of 5 years.

Out of 5 irregular cases with complications 2 became negative within 4 to 7 years and 3 are still positive.

## Conclusions and Comments:

- (I) From the above tables it is evident that the elimination of bacilii or in other words attainment of negative bacteriological status is in direct proportion to the regularity and the amount of sulphones taken.
- (2) Complications interfere with administration of sulphones thereby delaying clinical and bacteriological improvement.
- (3) It is logical therefore, to assume, that a slow induction of sulphones will reduce complications and thereby hasten improvement.
- (4) Such a slow induction can be effected by a reduction of the dose of sulphones and a very slow increase to the maximum covering a period of 9 months to 18 months. Preliminary trials in this direction have given encouraging results. An adult dose as small as 10 mgms. of DDS 3 times a week is being used as a commencing dose. The average adult commencing dose is 10 mgms. DDS daily for 6 days per week.
  - (5) No case of the drug resistence has been encountered so far.

	Reactions	Anaemia	Reaclions and anaemia
Lepramatous cases	35	3	8
Tuberculoid	4	_	_
Borderline	. 13	-	3

## **ANNOUNCEMENT**

Fifth All India Conference of Dermatologists and Venereologists will be held with Joint Annual Conference 1963 of The Association of Physicians of India etc. at Calcutta from 17th January, 1963 to the 21st January, 1963. Delegation fee is Rs. 20. For the other details of Railway concessions, accomadation etc., please write directly to Dr. D. P. Basu, the Organising Secretary, Joint Annual Conference, 1963, Merlin Park, 9, Gariahat Road, Calcutta 19.

All the members are ernestly requested to attend the Conference and make it a success.