DDS TREATMENT BY INJECTION; A COMPARISON

To The Editor:

Referring to my first report comparing the results of oral and parenteral DDS treatment [*Leprosy in India* **24** (1952) 130-132], in which the figures indicated that the parenteral method was the better one, I wish to say that further experience has corroborated that first impression. This has been shown by the results of a recent analysis of patients who have been receiving the injections for the past three years, comparing them with others given the oral treatment.

Originally we used a 20% suspension of the DDS powder in refined coconut oil, but now a 10% suspension in hydnocarpus oil is used, the latter being somewhat the less expensive. This less concentrated suspension is easily injected through a 19 gauge needle, an important consideration when many patients are to be treated. Arachis (peanut) oil when tried gave more trouble with "depot" effects than the others, although they are seen with any suspension; it is heavier and more difficult to inject than coconut oil, but lighter than hydnocarpus oil. There is no pain after injection if the DDS is very fine; there may be some trouble in this respect with a coarse powder.

The oily suspension is autoclaved in a bottle at 120°C for one-half hour. For use, the bottle is fitted with a cork through which are passed one long straight tube and one short bent one. After shaking, the amount immediately needed is poured into a sterile container from which it can be taken up by the syringe in the quantity to be injected.

The subcutaneous route has been used exclusively, the injections being given twice a week. After the injection, the site is well massaged.

In 1955 we gave a total of 47,141 injections to 3,375 patients (2,731 outpatients and 644 inpatients). I have compiled no comparative data since the time of the All-India Conference held at Puri in 1953, when we had had two years of experience with the parenteral method. The oral group then dealt with was the one which Muir had begun to treat in 1949; the last figures reported for this group (see below) were compiled three years later, when the number had been reduced by departures from the leprosarium and deaths from 119 to 83; the average period of treatment of these patients was 29 months. In 1950 I put 140 patients under the parenteral treatment, and at the time the Orissa report was prepared the 132 remaining patients had been treated for an average of 24 months. The results of these treatments were as follows:

Condition of patients	*Oral* (*av. 29 mos.*)	*Parenteral* (*av. 24 mos.*)
Negative	2 or 2.4%	4 or 3.0%
Nearly negative	9 or 10.8%	4 or 3.0%
Bacilli lessened 75%	7 or 8.4%	10 or 7.6%
Bacilli lessened 50%	27 or 32.5%	34 or 25.7%
Slightly improved	30 or 36.2%	68 or 51.5%
Stationary	2 or 2.4%	7 or 5.3%
Worse	6 or 7.2%	5 or 3.9%
Total	83 (99.9%)	132 (100.0%)

The following appeared in the conclusions of that report: "Parenteral use of DDS in oil suspension has been found better than oral use. In spite of equally quick absorption and equally high concentrations of the drug in the blood, injections for some reason give better results. The cost is much less if the trouble of injecting it is not taken into account." Our favorable opinion of the parenteral method has

been strengthened in the years since then, hence the large number of patients who were treated that way in 1955.

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