CORRESPONDENCE

This department is provided for the publication of informal communications which are of interest because they are informative or stimulating, and for the discussion of controversial matters.

ORAL *VERSUS* PARENTERAL DDS TREATMENT

Here follow, in some instances in more or less condensed form, letters received in reply to questions asked several leprosy workers known to have had experience with field work with DDS, and others who have used the drug by injection.

FIRST USE OF DDS BY INJECTION; RECOMMENDATIONS

To The Editor:

How did it happen that I first used DDS in India, and how was it used? It began with the realization at Chingleput in 1945 that the sulfone derivatives then available would be very expensive for large-scale use, and that a cheaper form was needed. Early in 1946, when in Dublin, I learned that the Imperial Chemical people were using the inexpensive parent substance, DDS, in the treatment of mastitis in cows, and I got in touch with them. As a result I took back with me later that year a 25% suspension of DDS in arachis (peanut) oil, and after preliminary trials set up an experimental treatment group early in 1947.

At that time there was no guide as to dosage, but to hit the leprosy bacillus hard I used as the starting dose 5 cc. of the suspension, or 1.25 gm., twice a week. Buttle, I think it was, had warned me not to give the drug by mouth because of its toxicity, and that was fortunate because with that dosage there might have been fatalities. Given as it was by the subcutaneous route, it caused severe anemia in several cases and psychosis in a few; I saw no severe hepatitis until I used it by mouth some years later. Before Lowe started his work in Nigeria he asked me about my experience, and I conveyed to him Buttle's warning about using DDS by mouth. However, he chose that route, in smaller dosage, with successful results known to everyone.

At the same time in 1946 I took back to India some sulphetrone crystals and began to use it also by injections, at the same time as did Dharmendra and Chatterjee independently, although they used the tablets—grinding them up and making a 3 per cent solution. After first trials I decided that it should be used as an oily suspension, thinking that an aqueous solution would be excreted too rapidly; this was reported at the Havana congress. However, because of the difficulty of injecting the suspension I returned to the solution (50%), and later with the aid of Bushby showed that that drug was not broken down to DDS in the body, an observation which he subsequently confirmed.

My present position regarding the choice of sulfone and the routes of administration may be summarized as follows: I advocate oral DDS as routine for inpatient, treatment and under controlled conditions; parenteral DDS for outpatient work, and where supervision is difficult or impossible. However, in severe reactions or very active lepromatous cases, where DDS is not well tolerated, I prefer injections of aqueous sulphetrone, it being practically atoxic because it is broken down in the body to a monosubstituted sulfone, called "semisulphetrone."

In "bush" therapy, if treatment is to be given twice a month at most, the parenteral

suspension of DDS should be the drug of choice. Sulphetrone would be excreted too quickly, and could not be given less often than once a week.

As for the choice between subcutaneous and intramuscular routes for DDS injections, I prefer the former. With hydnocarpus oil it was found to be easier and less liable to give trouble with semiskilled personnel. A subcutaneous abscess, whether due to infection or to simple lack of absorption, is easier to deal with than one which results from intramuscular injection. This preference extends also to sulphetrone injections, for a 50% solution is hypertonic and I do not like to put a hypertonic solution into a muscle.

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