REGIONAL DIFFERENCES IN TOLERANCE OF SULFONES

To the Editor:

It has been my impression for some years that East Africans do not respond to sulfones as well as West Africans, nor do they tolerate such high doses. Lowe (1951), in Nigeria, recommended a dosage of 200 mgm. DDS daily. I have generally found this too high, the frequency and severity of lepra reactions being a serious problem, even with very slow induction over a period of 13 weeks. Garrett (1956) states that a few tuberculoid cases remain with active-looking lesions for four or more years on a regimen of 400 mgm. twice weekly. In my experience this applies to about 10 per cent of cases with those flat, extensive and symmetrically-distributed macules which are usually—although, I think, wrongly—termed "tuberculoid" in Africa. About 20 per cent of these cases develop new lesions within the first few months of sulfone therapy, and in some of these the lesions become thickened—a conversion to the reactional tuberculoid. It is depressing to find that where, as often happens, sulfone has been given with the minimum of medical supervision, many patients of this type have developed crippling paralyses *after* commencing treatment. In my view a smaller dosage of sulfone could have avoided these tragedies.

Garrett also mentions that borderline and atypical tuberculoid cases often develop severe reactions, but considers these are usually due to a too-rapid increase in the dosage. I have seen them occur after only a single dose of 100 mgm. of DDS, and prefer to treat these cases initially with thiosemicarbazone (Wheate 1957).

In a recent trial of sulfone suspension, 25 per cent DDS in ethyl chaulmoograte, carried out in a group of patients at the government leprosarium, Makete, it was found that the dosage of 5 cc. (1.25 gm. DDS), found by Laviron *et al.* (1953) to be well tolerated by their patients in French West Africa, caused symptoms of early sulfone psychosis in the male patients. The females were unaffected.

This group of patients was selected solely on the group that they lived in the village farthest from the hospital, and the trial was intended to determine the optimum dosage of this preparation as a possible alternative to oral DDS in outpatient clinics. The dosage was 1 cc. per fortnight initially, increasing by 1 cc. each month. After three months all patients

were unanimous that the "injection" was better than the "tablets." The lepromatous patients stated that they had less myalgia, arthralgia and neuritis than they had experienced on oral sulfone, and no lepra reactions occurred. One or two of the tuberculoid cases which showed only partial resolution after several years' oral DDS proudly demonstrated the complete disappearance of their lesions. It was surprising, therefore, to find that after one month on a dosage of 5 cc. there was universal complaint. The men all complained of insomnia and mild disorientation immediately after the injection, symptoms which I regarded as indicative of incipient sulfone psychosis. The women were less definite in their complaints, which were mainly of excessive pain in the site of the injection. The patients have now been divided into two groups, one receiving 2 cc. (0.5 gm.) weekly, the other 3 cc. (0.75 gm.) fortnightly. It is as yet too soon to assess the therapeutic efficacy of these low doses.

Three points emerge from these observations: (1) East Africans do not tolerate such a high blood level of sulfone as do West Africans. (2) The macular leprosy of East Africa differs in its position in the "macular spectrum" from that of West Africa, being more unstable and more liable to excessive and damaging tissue reaction. (3) Low doses of sulfone will, in the long run, give better results than high doses.

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