

TO THE EDITOR:

I read with much interest your editorial in the *International Journal of Leprosy* of April-June 1961, in which you impartially presented the diverse views of Cochrane (1), Spencer Reed (2) and Wheate (3) provoked by an editorial appearing in the *British Medical Journal* (4). I regret only that an error regarding certain dates of publication systematically recurred.

Although Lowe did magnificent work in the application of oral DDS to the therapy of leprosy, it was not he who first published results on this subject. It was in fact Dr. H. Floch, director of the Institut Pasteur in French Guiana, of whose priority in this matter there can be no question (5a-d). I myself presented his second paper (5b) concerning the treatment of 101 cases of leprosy with DDS, at the Académie Nationale de Médecine of Paris on October 4, 1949.

Lowe's note (6), which is always cited as the first reference, and which was published while the work of Lowe and Smith (7) in THE JOURNAL was still in press, was thus indisputably later than those of Floch.

During the period August 1947 to October 1948, Dr. Floch and I exchanged views on the possibility of experimenting with the parent sulfone DDS, the active principle in all the substituted sulfones as pointed out by Floch (8) in THE JOURNAL.

Our friend Buttle and associates (9) and ourselves (10) published results on the antistreptococcal activity of DDS in mice, and then Rist (11) demonstrated its antituberculosis activity.

Until 1948, following the work of Faget and associates (12), only the

substituted sulfones were recommended for use because they were, apparently, less toxic than DDS. During discussions on the subject of these compounds at the Vth Congress of Leprosy in Havana (April 1948), Schujman and Cochrane remained firmly in favor of chaulmoogra, whereas Floch and others, notably Lauro de Souza Lima, stressed the superiority of sulfone treatment.

Cochrane and associates (¹³) then published results of trials with DDS. However, he used this in an injectable form (an arachis oil suspension), and he gave it in much too high a dosage, thus obtaining results which led him to prefer Sulphetrone. Moreover, he declined to admit that the activity of this latter compound was due to liberation of the parent sulfone. The pointed statement of Lowe (¹⁴) that "this treatment might well claim him as its father for he was the first worker to use it, unfortunately in doses too high to avoid toxicity. Even now, with a much reduced dosage, he finds his child troublesome and would apparently rather like to disown it" explains to a certain extent the surprising position taken by Cochrane in his letter to the *British Medical Journal* (¹).

It was, on the other hand, as early as April 1949 (^{5a}) that Floch reported very favorable results with 64 cases treated orally, and 22 others treated intramuscularly. His conclusions—slow progressive increase in daily doses reaching 200 mgm./day after about 5 weeks, the careful control of patients, and the incidence of side-effects during treatment—all remain entirely valid to this day.

Knowing your spirit of justice and your care for exactitude in these matters, I am sure that you will see fit to publish this letter in THE JOURNAL in order to establish "La vérité historique."

PROFESSOR JACQUES TREFOUEL

*Member of the Institute and of the
National Academy of Medicine,
Director of the Institut Pasteur*

*25 Rue du Docteur Roux
Paris 15, France*

REFERENCES

1. COCHRANE, R. G. Modern treatment of leprosy. *British Med. J.* **2** (1960) 1671 (correspondence).
2. REED, S. Modern treatment of leprosy. *British Med. J.* **2** (1960) 1672 (corresp.).
3. WHEATE, H. W. Modern treatment of leprosy. *British Med. J.* **1** (1961) 75 (corresp.).
4. [EDITORIAL] Modern treatment of leprosy. *British Med. J.* **2** (1960) 655-657.
5. FLOCH, H. and DESTOMBES. Traitement de la lèpre par le "sulfone-mère" (diamino-diphenyl-sulfone). (a) *Arch. Inst. Pastur Guyane et Terr. Inini, Publ. No. 190*, 1949; (b) *Bull. Acad. Nat. Méd.* **133** (1949) 568-571; (c) *Bull. Soc. Path. exot.* **42** (1949) 434-439; (d) *Internat. J. Leprosy* **17** (1949) 367-377.
6. LOWE, J. Treatment of leprosy with diamino-diphenyl sulphone by mouth. *Lancet* **1** (1950) 145-150.
7. LOWE, J. and SMITH, M. The chemotherapy of leprosy in Nigeria. With an appendix on glandular fever and exfoliative dermatitis precipitated by sulfones. *Internat. J. Leprosy* **17** (1949) 181-195.

8. FLOCH, H. The use of diaminodiphenyl sulfone. *Internat. J. Leprosy* **18** (1950) 534-535 (correspondence).
9. BUTTLE, G. A. H., STEPHENSON, D., SMITH, S. and FOSTER, G. E. Treatment of streptococcal infections in mice with 4:4 diaminodiphenylsulphone. *Lancet* **1** (1937) 1331-1334.
10. FOURNEAU, E., TREFOUEL, J., NITTI, F. and BOVET, D. Action antistreptococcique des dérivés sulfurés organiques. *Compt. rend. Acad. Sci.* **204** (1937) 1763-1766.
11. RIST, N. Action du p-aminophénylesulfamide et de la p-diaminodiphénylesulfone sur la culture des bacilles tuberculeux des mammifères et des oiseaux. *Compt. rend. Soc. Biol.* **130** (1939) 972-975.
12. FAGET, G. H., POGGE, R. C., JOHANSEN, F. A., DINAN, J. F., PREJEAN, B. M. and ECCLES C. G. The promin treatment of leprosy A progress report. *Publ. Hlth. Rep.* **58** (1934) 1729-1741.
13. COCHRANE, R. G., RAMANUJAM, K., PAUL, H. and RUSSELL, D. Two-and-a-half years' experimental work on the sulphone group of drugs. *Leprosy Rev.* **20** (1949) 4-64.
14. LOWE, J. Diaminodiphenylsulphone in leprosy. *Lancet* **2** (1951) 469-470 (corresp.).