Erythema Nodosum Leprosum

TO THE EDITOR:

I have been responsible for the coordination of the clinical investigations of B.663 for the past six years and consider that some of the conclusions in the paper by Dr. J. H. S. Pettit "The treatment of erythema nodosum leprosum with B.663" are not justified.

His statement that under the conditions of his investigations "B.663 . . . has no anti-inflammatory effect" and his comment that this investigation "should also disprove the much repeated misconception concerning the cessation of sulfones in ENL" are not borne out by the figures he presents. These figures could have been analyzed in at least two different ways:—

FIRST METHOD

In Group A: B.663 alone for 7 months followed by B.663 + sulfone for 7 months.

Four out of five required no, or virtually no ACTH when B.663 was given and sulfone stopped—one of these flared when sulfone was added.

In Group B: B.663 + sulfone for 7 months followed by B.663 alone for 7 months.

None of the five could discontinue ACTH—in fact, two required higher dosage during treatment with B.663 plus sulfone. When sulfone was discontinued two could stop ACTH completely or almost completely (½ point) and one was able to reduce ACTH considerably.

In Group C: B.663 + sulfone for 7 months followed by B.663 alone for 7 months.

With B.663 and sulfone two of five could stop ACTH by the end of the first treatment period. When sulfone was stopped two further showed dramatic reduction and the fifth halved his ACTH requirements.

SECOND METHOD

The groups may also be compared by analyzing group total scores at months 3, 10 and 17. The overall figures are as follows:—

Group	Months		
	3	10	17
A	78.5 (B)[a]	5.5 (B+S)[a]	14.5
B	83.0 (B+S)	5.1 (B)	41.5
C	108.5 (B+S)	77.0 (B)	20.0[b]

[a] B = B.663
S = Sulfone

[b] Assume 19 for C5 at this time

These figures illustrate that Group A showed a marked reduction on B.663 alone, which was maintained on B.663 plus sulfone. Group B showed a slight deterioration on B.663 and sulfone, probably consistent with the fluctuating nature of the disease, but a marked improvement followed when the sulfone was stopped. Group C, which we are told was a "more representative group," showed some 30 per cent reduction in ACTH requirements when B.663 was added to the sulfone regime. When sulfone was stopped the ACTH requirements were reduced by 82 per cent.

DISCUSSION OF THE RESULTS

Improvement occurred in all groups during the period of treatment when sulfone was stopped. This would suggest that the administration of sulfone is in some way related to the continuing presence of ENL, since a similar result was obtained whether sulfone was stopped at month 3 or at month 10. This would seem to invalidate the author's statement that "this study should also disprove the much repeated misconception concerning the sulfones in ENL."

In Group C the addition of B.663 to sulfone did, in fact, diminish the ACTH requirements, and this might well represent an anti-inflammatory action of B.663. The fact that this did not occur in Group B may be related to the fact that Group B was a *less representative group* than Group C. There is, however, conclusive evidence from the figures presented that B.663 administration does not produce a deterioration in ENL. There is possible evidence that it has an anti-inflammatory effect. This could be determined by comparing two groups of patients, one treated with B.663 alone and the other going without treatment for similar lengths of time and at the same period of the evolution of the disease (if this was not detrimental to any patient). There appears to be no justification for the categorical statement that "(our findings) show conclusively that B.663 . . . has no anti-inflammatory effect in ENL."

The ability to demonstrate whether B.663 has an anti-inflammatory action or not would have been greatly helped if a less rigid attitude to dosage had been adopted. The author's figures show that "steroid" therapy needs to be increased or decreased according to the severity of the patient's disease and its stage of evolution, and it seems that a similar attitude should have been taken toward B.663.

The author did not consider that higher dosage would give more satisfactory results, but gives no indication that he had ever used higher doses, and previous publications ([1, 2]) on this subject strongly support the view that higher doses are needed to supress ENL in some cases. We have further, as yet unpublished, evidence to support this view.

—P. D. Fowler

Geigy (U.K.) Limited
Pharmaceuticals Division
Roundthorn, Industrial Estate
Wythenshawe, Manchester 23, England
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REFERENCES

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2. Williams, T. W. Jr., Mott, P. D., Wertlake, P. T., Barba Rubio, J., Adler, R. C., Hill, II, G. J., Perez Saurez, G. P. and Knight, V. Leprosy research at the National Institutes of Health: experience with B.663 in the treatment of leprosy. Internat. J. Leprosy **33** (1965) 767-775. (Part 2).