TO THE EDITOR:

2,45

With reference to the letter of Dr. R. G. Cochrane and your addendum on the use of diaminodiphenyl sulfone [THE JOURNAL 18 (1950) 91], I have the following information to give. An extensive study of the pharmacological aspects of this substance, given both by mouth and by intramuscular injections, has been carried out in this department for the past year. The main objects of the investigation were to determine a suitable dose and the best method of administration. I have just completed an article on the subject, and below I give our conclusions regarding these two questions.

Mode of administration.—(1) The oral route of administration is the one of choice, since in case of this drug the intramuscular route offers no advantage. This applies not only to daily but also to semiweekly treatment. If for any reason treatment cannot be given daily, oral administration twice a week is as good as intramuscular injections at that interval.

(2) For oral administration it is better to give the total daily quantity in two divided doses than as a single daily dose. The divided doses produce a more constant blood concentration throughout the 24 hours. and the toxic effects are less marked.

Dose.-(1) The maximum daily dose should not exceed 200 mgm., as larger doses are not considered safe. When this quantity is given as a single daily dose the average daily range of blood concentration of DDS is between 1.0 and 1.5 mgm. per cent. However, when this quantity is given in two doses of 100 mgm. each, a more or less constant blood concentration of 1.0 mgm. per cent is maintained throughout the 24 hours.

(2) Treatment should be started with 50 mgm. daily and the dose gradually increased to 50 mgm. twice daily, and worked up to 100 mgm. twice daily in about 4 to 5 weeks.

(3) A matter for further consideration is whether a dose of 100mgm. a day will not meet the requirements. If this dose is found equally or only slightly less effective, it would certainly be preferable. This matter is being looked into. It may be stated that a dose of 50 mgm. twice daily (100 mgm. a day) will maintain a more or less constant blood concentration of about 0.7 mgm. per cent throughout the 24 hours.

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