

FURTHER ATTEMPTS TO BLOCK THE LSD REACTION BY PRETREATHENT WITH BOL (Experiments 56-D and 56-E).

Ginzel and Mayer-Gross reported that pretreatment with 3 mg. of BOL for one day attenuated the reaction caused by 40-50 mcgm. of LSD, and that two days pretreatment with 3 mg. of BOL blocked it completely. Concomitant administration of BOL with LSD had no effect. In previous experiments, we were able to confirm the latter finding but were, however, unable to confirm clearly attenuation of the LSD reaction by two days pretreatment with BOL. In one experiment, 8 subjects received 1 mg. of BOL orally for two days, and an additional milligram on the third day. Two hours after the third dose, these 8 subjects were challenged with 1.0 to 1.5 mcgm./kg. of LSD. A strong trend toward reduction of the intensity of the LSD reaction was observed, but the reduction did not reach statistically significant levels on any of the measures used. The experiment was not regarded as conclusive since  $\dot{\mu}$  of the  $\delta$ subjects proved to be resistant to LSD. In a second experiment, 10 subjects received 3 mg. of BOL three times daily for three days and an additional milligram on the fourth day. Two hours after the last dose of BOL these patients were "challenged" with 1.5 to 3.0 mcgm./kg. of LSD. Again a trend to reduction in the LSD reaction was observed, which did not reach

statistical significance. In this experiment, the partial cross tolerance between BOL and LSD may have been obscured by the relatively large dose of LSD used. Two further attempts to block the LSD reaction with BOL have, therefore, been carried out, using a dose of 1 mcgm./kg. of LSD, an amount comparable to that employed by Ginzel and Mayer-Gross.

## METHODS

Subjects. All subjects were Negro male prisoners who were serving sentences for violation of the Harrison narcotic laws. All were abstinent from opiates for at least six months, and all were in good physical and mental health. All except 2 of these had previous experience with LSD. In Experiment 56-D, 8 subjects were used; in Experiment 56-E, 10 subjects were used; in patients served in both experiments.

Drugs. Were given orally in solution. In Experiment 56-D, 1 mg. of BOL tartrate was administered orally at 8 a.m., 4 p.m., and 10 p.m. for two days prior to challenge with LSD. An additional dose of 1 mg. of BOL was given two hours before (at 6 a.m.) on the day of challenge with LSD. An identical schedule was used in Experiment 56-E, except that BOL was given for five days prior to challenge with LSD instead of for three days. In both experiments, the challenging dose of LSD was 1 mcgm./kg. given orally in solution to patients who were fasting.