

## EFFECTS OF ACUTE ADMINISTRATION OF BAS IN MAN

(95)

BAS (1-Benzyl-2-methyl-5-methoxy tryptamine) was synthesized by D. W. Wooley of the Rockefeller Institute. He found that it was an effective anti-serotonin when tested against carotid artery rings in vitro. He also found that BAS blocked the blood pressure elevation resulting from intravenous administration of LSD in dogs. Wilkins, in Boston, studied the effects of BAS as an antihypertensive agent. He found that it did cause significant reduction in blood pressure of hypertensives, and that, when administered chronically in doses ranging between 40-160 mg. daily (total dose), it induced effects resembling those caused by reserpine ("intolerable" sedation, snuffy nose, gastrointestinal symptoms, etc.).

Our experiments were carried out in order to study the effects of an acute or subacute administration of BAS in human subjects, and were preliminary to experiments in which the substance would be used in an effort to block the LSD reaction (see other report).

Subjects used were all former morphine addicts who had been withdrawn from opiates and had been abstinent from that drug for a period of at least three months. All were Negroes ranging in age from 21-40 years. All were in an excellent state of physical health, and none had any evidence of a major psychosis.

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BAS was administered orally. Single doses, ranging between 5-400 mg. which were increased gradually in step-wise fashion between experiments, caused no significant effects during the first 8 hours after administration. However, after the higher doses patients began to report the development of effects occurring 12-16 hours after taking the drug. These effects included dizziness, feelings of fatigue, nausea, and diarrhea. The observation schedule was accordingly changed and patients were studied from the 12th to the 20th hour after oral administration of 400 mg. of the drug. No significant effects on temperature, pulse, respiratory rate, resting blood pressure, pupillary size, or kneejerks were observed, although many of the patients did report fatigue, mental depression, and nausea.

Effects of repeated administration of doses of 150-200 mg. were then studied. Drugs were given at eight-hour intervals. No objective effects and no subjective reports occurred after the first two doses. After the third dose, however, patients began to report weakness, fatigue, dizziness, mental dullness, nausea, and diarrhea. These effects persisted for two to three days after the drug was discontinued. No objective changes were observed on pupillary size, reflexes, resting blood pressure, temperature, pulse, or respiratory rate.

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Discussion. In large doses, BAS induces marked subjective effects without any great objective change. It is not clear how these effects are produced; they could either be central or peripheral. It should be noted, however, that although BAS is a powerful anti-serotonin (as is LSD) no symptoms resembling those seen after LSD were observed.

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