

MEDICINE

Chemical Helps Mental Ills

Reserpine, obtained from an Indian root, may replace brain surgery and shock treatments. It has a tranquilizing action.

➤ A DRUG from an Indian root may successfully replace brain operations and shock treatments in many cases of mental disease, it appears from reports by many doctors to a New York Academy of Sciences conference in New York.

The drug is reserpine. It first became famous as a medicine for reducing high blood pressure. One of its most notable effects is a tranquilizing, or quieting, action.

Whether reserpine will become a cure for mental sickness cannot yet be told, since it has not been used long enough. But doctors seemed to agree that at the very least it would make patients better adjusted to life in a mental hospital and decrease by as much as 50% the number of man-hours needed to care for some of them.

Results called "astounding, even to psychiatrists of long clinical experience," were reported by Dr. Leo E. Hollister and associates of the Veterans Administration Hospital, Palo Alto, Calif. Dr. Hollister and associates gave the drug to 127 suffering from schizophrenia, one of the most serious mental diseases and one which accounts for almost half of the nation's mental hospital population. Most of these patients had been sick for at least nine years.

Of this group of very sick patients, five could be released from the hospital following treatment.

Equally striking results were obtained in extensive studies conducted at the Manteno State Hospital, Manteno, Ill., by Dr. Dean C. Tasher, chief, and Dr. Marianne Wallenberg Chermak, clinical director. In one group of 100 women with schizophrenia, reserpine produced positive results after shock treatment had been used for some time without satisfactory results. Some of the patients were highly antagonistic and destructive, others severely withdrawn prior to treatment with reserpine.

All of these patients, reported Dr. Tasher, have improved in degrees ranging from better adjustment to institutional life through complete social recovery and discharge from hospital.

Old patients with mental sickness that made them irritable and difficult to manage were transformed into pleasanter, more cooperative persons after treatment with reserpine, Dr. Anthony A. Sainz reported of studies at the Mental Health Institute, Cherokee, Iowa. Dr. Sainz is now with the VA Hospital and Psychopathic Hospital, Iowa City.

Of a test group of 89 patients in the study, Dr. Sainz reported that 61 were considered having undergone "remissions," that is, the disappearance of more than 75% of their symptoms.

Agitation, irritability and quarrelsomeness, principal complaints of the patients, disappeared uniformly in six to 24 hours after the drug had been taken. These symptoms lessened sharply in the testing periods of from one to six months during which reserpine was administered daily.

As a result, Dr. Sainz said, hospitalized patients as well as those who were cared for at home, required less attention. It was noted that the man-hours spent by psychiatric aides, nurses and doctors on such patients was decreased by an average of 50%.

Reserpine is unlike other drugs acting on the brain and central nervous system and shows a "basically new principle" of drug action, Drs. J. A. Schneider, A. J. Plummer, A. E. Earl and R. Gaunt, of Ciba Pharmaceutical Products, Inc., Summit, N. J., reported on the basis of their neurological studies.

Ciba markets its brand of reserpine under the tradename Serpasil. Reserpine was isolated by Ciba's Dr. Emil Schlittler in the firm's Basel, Switzerland, laboratories, in 1952.

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• RADIO

Saturday, February 19, 1955, 5:00-5:15 P.M. EST

"Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station.

Dr. Frank Glenn, surgeon-in-chief of New York Hospital, professor of surgery of Cornell Medical College, and head of department of surgery of New York Hospital, Cornell Medical Center, will discuss "Advances in Surgery."

MYCOLOGY

Chemical Controls Important Crop Blights

➤ A CHEMICAL that promises effective control of important fungus-caused blights of fruits, vegetables and other plants was announced in *Science* (Jan. 14).

Called B-622 in the field tests, this chemical represents a new class of fungicides, which are s-triazine derivatives. It was found effective in actual growing tests against apple scab, celery early blight, muskmelon leaf spot, onion-foliage diseases, leaf diseases of ornamentals, potato late blight, tomato anthracnose, dollar spot, and diseases of turf which are caused by *Helminthosporium*.

Chemically it is 2,4-dichloro-6-(o-chloro-anilino)-s-triazine.

This development was reported by Calvin N. Wolf of Ethyl Corporation research laboratories, Detroit, Paul H. Schuldt, Boyce Thompson Institute, Yonkers, N. Y., and M. M. Baldwin, Battelle Memorial Institute, Columbus, Ohio.

Science News Letter, January 29, 1955



SHOT IN THE ARM—Oil wells pepper the waters of Lake Maracaibo in Venezuela, the world's second largest oil producing area. The plant, shown at the bottom of the picture, traps escaping gas at the rate of 154,000,000 cubic feet daily from the wells and injects 137,000,000 cubic feet right back into the oil formation. This makes the strata give up one-third more oil. The remaining gas is used to run the plant's machinery.