MEDICINE

## New Quieting Drug

➤ THE 28-YEAR-OLD woman was lying in the hospital bed with her right hand held up as if to take an oath.

When the doctors and visiting reporters came into the ward, she started weeping and raving incoherently about being a good girl, going to church, being neglected, wanting to go to a hospital. None of it made much sense. She still held up her right hand.

A doctor took her blood pressure and then slowly injected medicine into her veins. Within five minutes she was lying quietly, her right hand no longer upraised. eyelids began to droop and her rambling talk stopped as she grew drowsy under the influence of the medicine.

She had given a striking example of the action of a new tranquilizing drug.

She was one of several patients shown visiting doctors and the press at the first clinical presentation of the drug at a medical staff conference of the District of Columbia General Hospital, Washington.

The drug is called Sparine by its manufacturers, Wyeth Laboratories of Philadelphia. It has been known in the laboratory as WY—1094. It is a phenothiazine derivative that scientists will call promazine hydrochloride. It is related chemically to an older tranquilizing drug, chlorpromazine, but lacks the chlorine of that drug.

Sparine is still undergoing extensive testing and is not yet available for general use. At the D. C. General Hospital it has been given to more than 550 patients. About 200 of them, like the young woman, suffered from mental disease, either manic depressive psychoses or agitated stages of schizophrenia.

About 300 alcoholics with delirium tremens have been treated. The doctors and nurses at the hospital demonstrated in a colored motion picture how these patients became calm, rational and in most cases slept normally after a single injection of the drug into the veins.

Patients with acute hallucinations, seeing and hearing things, were similarly relieved.

Once the acute phase had been brought under control by injections of the drug into the veins, patients took it by mouth or had injections into the muscles until they were ready to leave the hospital.

Patients with delirium tremens are ready to leave the hospital in three to four days, compared to the 10 to 12 days needed with other treatment.

The speed with which the drug takes effect is one of the impressive things about it. Another which the doctors pointed out is that, while the patients go to sleep, they can easily be aroused to eat, answer questions and for medical examination.

The new drug has been used effectively in treatment of 50 narcotic drug addicts, easing them through the withdrawal period without the use of any narcotics. It relieves the nausea and retching, makes muscle and bone pains and abdominal cramps more tolerable.

It can also be used for barbiturate sleeping pill addicts.

Advantages of the new drug include: calming without depression, little or no fall in blood pressure, no shock-like collapse, no rapid heart action, no pain on injection, no tissue destruction at site of injection, and, so far, no jaundice or blood cell changes.

It is not in itself a cure, but because it calms the patients it makes possible speedier and more effective use of other methods of treatment.

The conference at which experience with the drug was presented was conducted by the psychiatric staff of the hospital under the direction of Dr. John D. Schultz, chief of psychiatry at the hospital and associate professor of psychiatry at Georgetown University School of Medicine.

Participating in discussion of the drug were: Dr. Jay Hoffman, St. Elizabeth's Hospital; Dr. George Raines, Georgetown Medical School; Dr. Vernelle Fox, Georgian Clinic, Atlanta, Ga.; Dr. Jack Kleh, D. C. Village for the Aged; Dr. Earl Mitchell, chairman, Sub-Committee on Alcoholism, D. C. Medical Society; Dr. Anthony Zappala, D. C. Alcoholic Rehabilitation Program; Dr. James Shea, chief resident, Georgetown Medical Division, and Dr. Paul Sullivan, resident in psychiatry, Georgetown Medical School.

Science News Letter, March 3, 1956

SURGERY

## **Ear Operation for Deafness One of Safest**

➤ USE of a microscope and an improved aseptic, or germ-free, technique has made an ear operation "one of the safest surgical procedures."

The operation is called the fenestration operation. It consists in cutting an opening through ear-clogging bone formation to relieve one kind of deafness. It is not suitable for all patients.

A record of 4,120 consecutive fenestration operations in 16 years with no death and no case of serious complication was reported for Northwestern University School of Medicine, Chicago, by Dr. George E. Shambaugh Jr.

The microscope that lets the doctor see the unusually small structures within the ear is also used for operations to mobilize the stapes, the stirrup-shaped innermost bone of the ear, Dr. Shambaugh told a regional conference of the International College of Surgeons in White Sulphur Springs, W. Va.

Dr. Shambaugh said tissue studies show the so-called "normal physiological saline solution," or salt solution, used for irrigation purposes is apt to kill cells or damage them.

"We are hoping," he said, "to interest drug manufacturers in making available to surgeons sterile solutions that are more truly physiological."

Physiological salt solutions are intended to come close, in action, density and osmotic pressure, to most animal fluids, such as blood.

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