

PSYCHIATRY

Specifications Being Made For New Mental Disease Cure

Drug That May Be Used As Are Insulin and Metrazol To Treat Schizophrenia; Will Not Shock Patients

A DRUG better and less severe than either insulin or metrazol as a sanity-restoring remedy for the hitherto hopeless mental ailment, schizophrenia, seems promised by research reported by Dr. G. Edward Hall of the University of Toronto at the meeting of the American Psychiatric Association.

Appropriately enough, this important work is going on at the laboratories and under the direction of Sir Frederick Banting, the man who gave insulin to the world in the first place as a life-saving remedy for diabetes.

The drug that may be the weapon for final conquest of schizophrenia, most widespread mental disease, has not yet been found. Specifications for it, however, are being prepared in the studies reported, and the search for the drug is already under way.

"Neither insulin nor metrazol," Dr. Hall said while fellow scientists were congratulating him and acclaiming his work, "will be the ultimate drug used to produce beneficial effects in schizophrenia."

The ultimate drug, according to present specifications, will be one which either gives the brain anemia temporarily or slows down its electrical activity, or perhaps does both, because careful laboratory investigations by a whole team of scientists, including physiologists, a neurologist and an electrical engineer, show that the two effects which both insulin shock and metrazol shock produce in animals are brain anemia and a change in electrical activity to a pattern of very slow, random brain waves. These two effects, presumably, and no others, are responsible for the cures being achieved by insulin and metrazol.

In addition, the new drug will probably not produce convulsions and patients will not have to undergo anything like the severity of the shock treatment now used to reclaim their minds from the unreal and often unhappy world of schizophrenia.

Besides Sir Frederick Banting and Dr. Hall, the research team which is un-

ravelling the mystery of why insulin or metrazol can restore sanity consists of Dr. W. R. Franks, Dr. B. Mendel, B. Leibell, J. E. Goodwin and Dr. D. P. C. Lloyd. The need for such a team of scientists drawn from various fields was emphasized by Dr. Hall, who said that schizophrenia and its chemical or pharmacological cure is too big a problem to be attacked from one angle or by one man.

The aid of psychiatrists, Dr. Hall said, will be enlisted when he and his associates are ready with a drug for use in treating patients.

Psychiatrists are enthusiastic because work such as Dr. Hall reported promises not only a better weapon for treating schizophrenia but also greater knowledge of the physical effects of insulin or metrazol on the brains of the patients. This research of the Toronto scientists also offers promise of finding the defect or fault in the physical mechanism of the brain that results in schizophrenia, in other words, the cause of the disease.

The psychiatrists have so far been working in the dark with insulin and metrazol, getting good results in many cases, but not knowing exactly why. Even the original discoveries of insulin shock treatment by Dr. Manfred Sakel of Vienna and of metrazol treatment by Dr. L. Von Meduna of Budapest seem to have resulted from what might be termed good "hunches."

A note of caution on the whole problem of shock treatment of schizophrenia was sounded when psychiatrists from all over the country reported details of their results. Reminder of direct danger appears in one report of three deaths in insulin-treated patients.

Further caution is urged on the ground that not enough time has elapsed to make sure that the cures will be lasting. Even if they should not be, the treatment is worthwhile in one psychiatrist's opinion because it at least restores patients to useful, normal life for a period of time, if not for life.

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KNOW THEM?

These two very different looking creatures are both wood ticks. One is enlarged from gorging on a dog host.

PUBLIC HEALTH

Danger of Spotted Fever Seen in Large Crop of Ticks

THIS year's crop of wood ticks is unusually large, particularly in the East. Vacation haunts have hordes of them. More surprising is the fact that vacant lots in cities are for the first time playing host to the common dog, or wood, tick.

One in several hundred of these ticks may carry the virus of Rocky Mountain spotted fever. That one tick, which in no way can be distinguished from the rest, may cause a fatal infection in the person it bites.

The *Journal of the American Medical Association* (June 4) carries a statement on prevention of dangerous wood tick bites.

Keep the ticks from gorging on the blood of dogs. Pick the ticks off with a pair of forceps or tweezers. Dust the dog every five days with derris powder. Handle the ticks with care.

Wear boots laced over the trouser legs when walking in tick-infested regions.

Feel the back of your neck and head, their favorite feeding places. Examine children carefully in these spots twice a day. This will reveal the presence of a tick in time to prevent a fatal bite.

Examination of the whole body is necessary after exposure to ticks. If one is found, pull it off at once. Disinfect the bite and the surrounding tissues by in-

**DANGER!**

The wood tick is much smaller than he appears in this enlarged picture, but if he is one of the few infected with spotted fever he is a real menace.

serting a round toothpick dipped in iodine into the exact spot where the tick was attached and drilling it in slightly.

To detick clothing, place it in a vessel that can be tightly covered and set on top of it a pan containing half a teacupful of carbon tetrachloride or carbon disulfide. A few hours of such fumigation kills all ticks.

Wood ticks are numerous along the eastern coast from Massachusetts to Florida, especially within a few miles

from shore. Texas and Florida have a great many. Parts of Iowa, Minnesota and Wisconsin are infested.

Islands off the coast of Massachusetts and South Carolina are heavily infested, especially Martha's Vineyard, Nantucket and Naushon.

The Narragansett Bay islands have many. The eastern half of Long Island and along Chesapeake Bay in Maryland are other areas popular with ticks.

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Now tuberculosis is being treated in the pre-tuberculous stage and the American Rheumatism Association and similar associations in 20 different countries of the world hope to make the same progress in the treatment of this widespread ailment."

Sulfanilamide Treatment

Getting down to specific methods of treatment, Drs. Walter Bauer and H. C. Coggeshall of Boston reported that sulfanilamide, new and popular chemical remedy, is the most effective treatment yet devised for gonorrheal arthritis but is not effective in ordinary rheumatoid arthritis, which is the commonest variety.

Sulfanilamide has been used to cure cases of blood poisoning, septic sore throat, erysipelas and other infections including gonorrhea. It cures cases of gonorrheal arthritis in three to four days.

In ordinary arthritis which is not due to gonorrhea, this new remedy is, unfortunately, ineffective. Methods of treating ordinary arthritis include rest, diet regulations, clearing up of infections in teeth and tonsils and other measures indicated by study of the individual patient.

Gold Salts Tried

Physicians in Europe have reported success in treating chronic arthritis with gold salts. Drs. J. Albert Key, Herman Rosenfeld and O. E. Tjoflat, all of St. Louis, reported good results with this same treatment in their patients. American physicians, however, have in general been afraid to use this treatment because of the danger involved.

The gold treatment consists of injecting gold salts into the patient's body. The danger lies in giving more of this foreign material than the body can handle. Unless very carefully administered the treatment might prove fatal.

Gold salts are derived from gold by chemical treatment.

Spinal Arthritis

Pains which are often attributed to ailments ranging from angina pectoris to gall bladder trouble or appendicitis are really due to spinal arthritis, Dr. William J. Kerr of San Francisco pointed out.

Dr. Kerr, who presided at the sessions of the American Rheumatism Association, as president, told of cases in which appendicitis operations were performed which turned out to be cases of

MEDICINE

Arthritis Not Now Hopeless; Early Treatment is Needed

"RHEUMATISM—or arthritis, to give it its fashionable name—is no longer hopeless, something can be done about it if patients get at it early, take it seriously, and play the game with the doctors."

This optimistic statement was made by Dr. Loring T. Swain of Boston, secretary of the American Rheumatism Association at its meeting in San Francisco.

"If the layman who gets rheumatism would take it seriously," said Dr. Swain "and go into the hospital to have his

case studied, when he first has twinges in his joints, much more could be done for him.

"Treatment must be individual and is much more effective in the early stages than after the condition has run until the patient is crippled.

"The situation with regard to rheumatism today is about what the tuberculosis situation was many years ago. In the old days people considered tuberculosis hopeless and did not see a doctor until the last stages of their illness.