PSYCHIATRY

Insulin Promises Cure For Common Mental Disease

Treatment Used in Vienna and Confirmed by Trials In United States Gives New Hope to Thousands

NSULIN, the gland extract that makes life possible for thousands of persons suffering from diabetes, now promises to save other thousands from the living death of insanity.

The accidental discovery of the effect of this gland extract on the clouded minds of narcotic drug addicts and sufferers from schizophrenia (split-mind), wide-spread mental disease, was described by Dr. Manfred Sakel of Vienna, Austria, at the meeting of the American Psychiatric Association in Pittsburgh, Pa. This treatment is being hailed as almost the first promising weapon of attack on this centuries-old mental disease.

A morphine addict in a Vienna hospital, the story goes, was found to be suffering from diabetes. He was given insulin for this condition. As sometimes happens with insulin treatment, he had an "insulin shock," a state the reverse of diabetes in which the body uses up sugar too fast and the amount of sugar in the blood falls below normal level. Much to the doctor's surprise, when this patient recovered from the insulin shock, his mental condition was greatly improved.

Other patients, who had no diabetes but were suffering either from drug addiction or from mental disease, were then given large doses of insulin, to induce shock. In many of these, the mental condition also improved, apparently permanently.

Confirmation

Similar experiences with the use of this new treatment for schizophrenia were reported by these American psychiatrists: Drs. Solomon Katzenelbogen, Herbert Harms and Dean A. Clarck of Henry Phipps Psychiatric Clinic, Baltimore, and Spring Grove State Hospital, Md.; Drs. Joseph Wortis, Karl M. Bowman and Leo Orenstein of Bellevue Hospital, New York; and Drs. G. Alexander Young, Richard H. Young and Louis G. Roucek of Omaha.

From a third to half the patients treated by this method showed improve-

ment in their mental state which appears to be permanent, although the treatment is so new that it is not yet possible to say how long the improvement will last. In some cases it has lasted for three years.

The psychiatrists seem agreed that the treatment is most successful in acute cases of schizophrenia in which the patients are young and have not been ill very long. Chronic cases do not seem to respond as well to the treatment.

The treatment is not without danger. Insulin shock brings on hypoglycemia, a grave condition in which there is less than normal sugar in the blood. This condition occurs spontaneously in some persons who show symptoms that may be mistaken for mental disease, Drs. Edwin J. Kepler and Frederick P. Moersch of the Mayo Clinic reported. Hypoglycemia leads rapidly to death, unless the sugar lack is promptly remedied. This may be done by injecting sugar into the veins or giving the patient sugar water to drink.

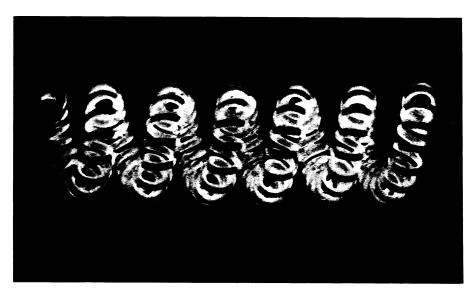
When insulin shock is induced to

treat mental disease, the resulting hypoglycemia or sugar lack is checked by giving sugar. The danger of this new mental disease treatment is that the sugar may not be given soon enough. The Omaha physicians reported two deaths and two other cases which nearly ended fatally in spite of efforts to bring the sugar level back to normal following the shock.

How or why insulin shock restores the sanity of the patients is still an unsolved mystery. It may be that the shock itself jolts the mind back to normal, or it may be that the temporary change in the sugar level restores the body's intricate chemical processes to normal. Since no one knows what causes schizophrenia, no one can yet say why the treatment remedies the condition in certain cases. But the treatment itself may give a clue that will lead to solution of the cause of the disease. That in turn should lead to even greater success with the treatment since it will show how the treatment can be modified and made specific— a "sure cure," perhaps.

Large Group

Schizophrenia is the term covering a large group of mental diseases or psychoses. It is also known as dementia praecox. The fundamental basis of personality consists of a person's mood and emotions. Unity and harmony of emotions and association of ideas is so usual that it is almost inconceivable that there should be any lack of such agreement. But this sort of mental disease is charac-



COIL AND RECOIL

This is how the coil in a new incandescent lamp looks when it is magnified. Recoiling the coil on itself is said to reduce the amount of wattage drained away by the gas in the bulb and increase the amount available for light.

terized by a disorder of feeling and thinking and a consequent disturbance of the patient's relations to the outer world. It is this state which insulin gives great promise of remedying.

Science News Letter, May 22, 1937

MEDICINE

Sudden Deaths of Mothers Is Price Paid for Less Pain

Deep Amnesia and Analgesia Give Relief But Result In Later Bleeding and Shock With Drugging of Baby

THE PAINS of childbirth—are they to be bravely endured or humanely prevented?

This question, perennial in medical circles and among childbearing women, claims the leading position in a current issue of the *Journal of the American Medical Association* (May 15).

Dr. Thaddeus L. Montgomery of Philadelphia reports a five-year study of the number and nature of anesthetic deaths made from the records of the maternal welfare committee of the Philadelphia County Medical Society.

Except for the deaths that occur during labor or within twenty-four hours afterward, the maternal death rate has gone steadily down during the five-year period.

But the physician's share in responsibility for sudden death in and after labor has increased more than 100 per cent., Dr. Montgomery finds. Mistakes in judgment and errors in technique account for this, he believes.

"Apparently something is wrong with methods and management in labor," Dr. Montgomery declares, "and, saddest to relate, whatever is wrong is going more astray with each succeeding year."

Deep Amnesia Blamed

Deep amnesia and deep analgesia—the method used for lessening the pangs of childbirth—are responsible for this bad showing of current obstetric practice, this doctor finds after reviewing some 155,000 cases of live births, 1,096 of which resulted in the death of the mother.

Women must be prepared to accept a moderate and safe degree of analgesia. If they will accept this, they will pass through delivery in better condition than the mother who is "drugged to an unconscious state and whose labor becomes a blank chapter in her life," this obstetrician states.

"The accoucheur seems often so bent on getting his patient asleep and her baby delivered that he gives little thought to the outcome of his hasty procedures," Dr. Montgomery charges.

When the birth of the child is accomplished, he is abruptly confronted with results. The analgesic agent that gave the mother such profound rest has narcotized the baby.

The material that brought the mother forgetfulness of her experience combines with the third stage bleeding to produce obstetric shock.

The anesthetic that made operative delivery convenient has relaxed the uterus and caused bleeding.

The situation then calls for real generalship, and if it is not forthcoming, the mother dies.

What answer shall the doctor give the prospective mother who wants first to know whether the pangs of labor will be eliminated?

This is what Dr. Montgomery would tell her:

- 1. That he sympathizes with her desire for relief and is familiar with and uses in every labor various methods of attaining that end.
- 2. That he must select at the time of labor the drugs that seem best adapted to her condition, as what is best for Mrs. Smith is not always best for Mrs. Jones.
- 3. That her safety and the safety of the child are paramount issues and that with these thoughts uppermost she will be attended closely during the critical period of labor.

On the basis of this study, spinal anesthesia is condemned as a method of obstetric practice. Furthermore, Dr. Montgomery finds that the use of barbituric acid derivatives are not as free of danger as many reports would indicate.

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Balloons first proved useful in war in 1794, when a French officer gave signals from the air and thus helped win a victory over the Austrians.



MASTS

Towering to a height of 130 feet are these giant wooden masts which will support antenna for the improved trans-Atlantic radio communication. Workmen on the poles at Riverhead, Long Island, give a size comparison. The masts were shipped as deck cargo by steamer from the West Coast.

ARCHAEOLOGY

No Secret to Pyramids Says German Professor

O USE trying to read mystic secrets from Egypt's pyramids by numerology or any other theories.

The pyramids have no secret, is the emphatic view of a German Egyptologist, Dr. Georg Steindorff, professor emeritus of Egyptology, University of Leipzig, who is giving a series of lectures at the Oriental Institute of the University of Chicago.

Egypt's pyramids were simply royal tombs, and evolution of the pyramid form from flat-topped tombs is well understood, Dr. Steindorff explained. Yet popular notions persist that the pyramids had mathematical or astronomical significance. The most popular theory, the German Egyptologist said, assumes that the Egyptians knew the relation of the circle to its circumference, that is, the value of pi. However, they had no such knowledge in the pyramid era.

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