

MEDICINE

Fits Produced As Protection Against Epileptic Seizures

Shocked Electrically into Seizures in Safety of Physician's Office, Epileptics May Be Spared Dangers

A SORT of vaccination against epileptic fits to protect both public and patient against sudden seizures in traffic, at work and under other dangerous conditions, is about ready for practical use.

The epileptics are literally shocked through the brain, electrically, into their seizures which occur safely in the privacy of a physician's office.

Dr. Lothar Kalinowsky and Dr. Foster Kennedy, New York psychiatrists, suggested this new method to the American Neurological Association meeting at Atlantic City. It upsets ideas physicians have had about this disease.

Shocks of over 100 volts are deliberately administered to the brains of patients. This electric shock treatment is identical to that used in treating schizophrenia (dementia praecox). Dr. Kalinowsky originally introduced in this country this other electric shock treatment.

Producing one fit to protect a person from having another one later is a novel idea. Physicians have supposed epilepsy to be a sort of self-perpetuating disease—

each fit making the patient more susceptible to the next.

In the experiments by Dr. Kalinowsky and Dr. Kennedy, the epileptics first went for a period without the luminal they had been taking to prevent seizures. Then each was given a 60-volt electric shock. This failed to produce a fit, although 60 volts is enough to bring on a fit in some non-epileptics—85 volts being the average amount necessary. Gradually the current was stepped up. Only when 100 volts was reached did a fit result.

After the first convulsion, it was necessary to step up the current even more to produce a second one. This time it took 115 volts.

One patient had such a high threshold of sensitivity to the shock that convulsions could not be produced even with the highest current used in the electric shock.

When a convulsion occurs, however, it is always at maximum strength. Stepping up the current more makes no change in its intensity. That is purely a matter of muscular development.

The fits produced are identical in every way with ordinary epilepsy, the experimenters found.

Low currents produce a "petit mal" state, a familiar occurrence in epileptics. Increasing the voltage produces a real convulsion after a latent period. Stepping it up still more brings on the seizure with a very short or no latent period. All these gradations between a short petit mal and a generalized convulsive seizure are comparable to what happens in epileptics.

Various neurological measurements and observations of patients in intentionally produced fits are throwing entirely new light on epilepsy, ordinarily so difficult for physicians to observe. Opportunity for scientific study is particularly rare in the case of petit mal which comes on without warning and sometimes even without the knowledge of the patient.

Science News Letter, June 21, 1941

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Unborn Infants May Get Deadly Brain Disease

UNBORN infants may contract a deadly brain disease from their mothers who are themselves apparently

TRAINING CLASS

Making a picturesque sight with their equipment are these four apprentice welders, taking part in the U. S. Steel Corporation's program of training workers for skilled jobs, to meet defense requirements.



