PSYCHIATRY

Brain Waves Show Tendency To Epilepsy Is Inherited

Carbon Dioxide Plays Important Part in Problem— High Amount in Grand Mal Patients, Low in Petit Mal

BRAIN wave studies show that a tendency to epilepsy can be inherited from one's parents, even though the latter do not themselves have epilepsy.

This answer to the age-old question of whether it is safe for epileptics to marry and have children was given in an announcement by Drs. William G. Lennox and F. A. Gibbs and Mrs. E. L. Gibbs, of Boston City Hospital, at the meeting of the American Psychiatric Association in Chicago.

Solution of the problem of epilepsy is not impossible in an age of electricity, they said.

Brain wave patterns characteristic of epilepsy were found in over half of a group of parents of epileptics. Abnormal brain wave patterns were seen 10 times oftener among the parents of the epileptics than among members of a control group who were not closely related to an epileptic. In 92 per cent. of the families in which records were obtained of both parents, at least one of the parents had a definitely abnormal brain wave record.

"We believe that a disordered rhythm of brain waves is inheritable," the investigators stated, "and that the parent who shows this disorder, though free himself of the symptoms, is a carrier of the disorder.

"Hereditary traits seem discouragingly indelible," they added, "yet a hereditary problem which is electrical cannot be considered insoluble by our boasted age of electricity.

"The physico-chemical elements which combine to cause an electrical discharge are known and what is more important, certain alterations in these elements suppress the abnormal rhythms and the attending seizures."

Carbon dioxide, the gas that leaves your lungs with every breath you exhale, may be the key to the solution of the epilepsy problem. It seems to play the most important role in the electrical disturbances associated with epilepsy, the Boston investigators said. The concentration of carbon dioxide is abnormally high in patients subject to severe convulsions or fits, their chemical studies showed. It is abnormally low in patients suffering from transient loss of consciousness in the "petit mal" type of epilepsy.

The regulation of carbon dioxide in the blood in the arteries is regulated by the act of breathing, it was explained, but this does not explain the presence of carbon dioxide in blood leaving the brain nor the opposite measurements obtained in severe convulsions and petit mal seizures. It may take a long time to work out the relation between carbon dioxide and epilepsy and to apply it to solution of the problem but the investigators pointed out that "at least we seem to be on a path which leads somewhere."

Football For Epilepsy

LEARNING to play football and baseball as a means of overcoming epilepsy is a novel idea which may nevertheless be successful. Cases in which a rigorous program of physical education helped epileptics recover to the point where one lad became captain of high school football and baseball teams were reported by Drs. Temple Fay and Michael Scott, of Temple University, Philadelphia.

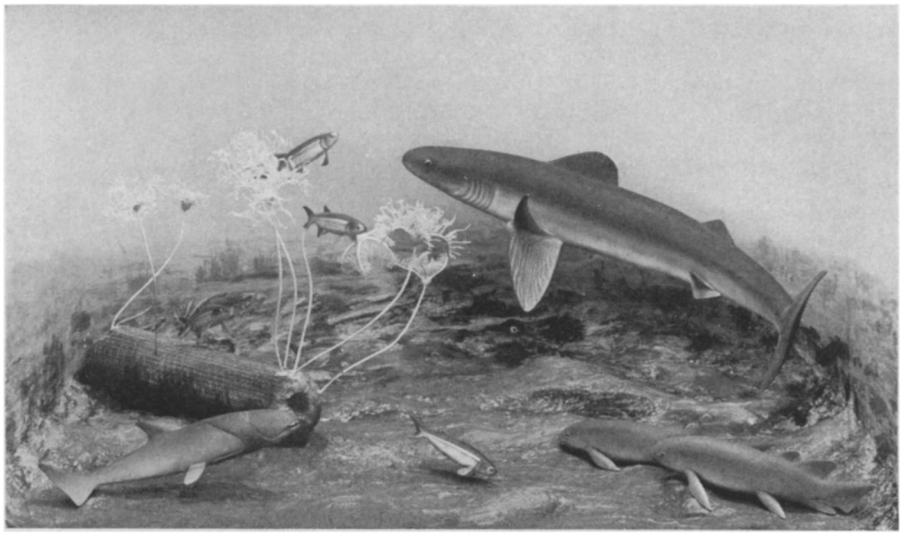
The idea back of this treatment was the psychiatrists' belief that an undersized heart was responsible for the epileptic seizures in nearly one-third of the patients they studied. The athletic program treatment was designed to develop "athlete's heart." The undersized heart, it was explained, might be temporarily unable to supply sufficient nourishment to the brain, causing temporary "starvation." The epileptic fits were believed to result from this condition.

New Drug For Epilepsy

MORE than 60 per cent. of a group of 250 epileptics have been completely free from seizures or fits during the two years they have been treated with a new drug, known as dilantin, Drs. H. Houston Merritt and Tracy J. Putnam, of Boston City Hospital, reported. Another 13 per cent. were greatly relieved.

These patients had been having the severe convulsions of grand mal epilepsy. Patients suffering from petit mal epilepsy were completely relieved of attacks in 38 per cent. of the cases and another 20 per cent. of these were greatly improved.

The usefulness of the new drug, dis-



"AS IT WAS IN THE BEGINNING"

Primitive fishes of the Devonian sea that once covered what is now western New York, as restored at the Buffalo Museum of Science. A big-finned shark has his eye on a group of small relatives of the modern gar, which are dodging among the tentacles of a group of crinoids, to avoid him. On the bottom, an armored pre-fish form and two lungfish.