

PSYCHIATRY

Slow Motion Pictures Permit Close Study of Epilepsy Fits

Psychiatrists Learn That Choked Anger Can Raise Blood Pressure; Child Killers Think Death Reversible

A MOVING picture attack on a ten billion dollar disease was presented at the meeting of the American Psychiatric Association in San Francisco by Dr. S. Bernard Wortis of New York University's Bellevue Medical College and Drs. Carney Landis and Hans Strauss of Columbia University, New York City.

The disease, which runs up the ten billion dollar bill, is epilepsy, the falling sickness that afflicted St. Paul and Julius Caesar and continues to afflict mankind in untold numbers. There are 500,000 epileptics in institutions in the United States today, each of them costing the state about \$20,000. There are uncounted other sufferers who are cared for in their own homes.

On the screen the New York psychiatrists showed a patient jerking and writhing and shaking in a seizure of convulsions induced by metrazol, one of the drugs being used to treat the mental disorder of schizophrenia.

The picture was taken with a high speed camera so that the doctors could watch the convulsion in slow motion and observe each detail of it. This metrazol-induced convulsion in the schizophrenic patient they found corresponded closely in some of its phases to the major seizure or fit of epilepsy.

In spite of the antiquity and widespread prevalence of epilepsy, Dr. Wortis explained, doctors know very little of the mechanism of the convulsion itself. The high speed motion picture

camera gives them for the first time a chance to find out just what happens during the convulsion.

Horrible as the convulsion is to the layman's eye, it is all over in about a minute. On the screen this horrible minute is drawn out to whatever length the doctors wish, so they can see which muscles contract, which relax, the order in which contractions and relaxations take place, and similar details.

Since they know which nerves govern the muscular activity they are watching, and where these nerves start in the brain, they hope to be able to locate the part of the brain that is affected in epilepsy, and then, perhaps, to work out more exact methods of treatment.

Anger Boosts Blood Pressure

If you get mad at the boss and tell him so, you will probably lose your job, but if you stay mad at him for years without boiling over at him, you are probably damaging your arteries and building up a dangerously high blood pressure.

Hostility suppressed for years like a boiling volcano which never erupts is the fundamental cause of the malignant high blood pressure for which no physical cause has ever been found, Drs. Franz Alexander and Leon J. Saul of the Institute for Psychoanalysis in Chicago reported.

The cases of two men and two women who all had this same consciously suppressed hostility and rage were cited to

show how this could cause high blood pressure.

The hostility toward the boss, which all four patients felt, was not due to the boss himself but in every case to rage at having been forced by a dominating mother to lead dutiful, conventional lives which they hated. For these are not the red-faced, choleric, tempy persons whom you suspect at first glance of having high blood pressure. The four patients and others like them are gentle, generous to subordinates, conscientious, model citizens.

Measurements taken at psychoanalytic sessions showed that the blood pressure rose when the patient was found by psychiatric analysis to be at a pitch of rebellion and dropped to normal when the patient had a temporary spell of inner calm.

In this the psychiatrists see hope of preventing dangerously high blood pressure by giving psychiatric treatment early while the rises are fluctuating and not very great. In time these fluctuations, they believe, damage the arteries, narrowing the bore so that the heart must work at constantly greater pressure to drive the blood through.

Not all patients with suppressed rage at being dominated develop high blood pressure, Drs. Saul and Alexander said. Some may accept the domination and submit to it. Others may shun situations where they must be submissive, like the man who did free lance work because, as he said, he could not stand being bossed.

TAKING OFF

The Mayo Composite Aircraft is an English means of launching heavily loaded seaplanes for transoceanic service. The super-power required for take-off is provided by the lower component. At the left they are shown just before separating. Once in the air the upper portion can fly alone (center) and the lower portion returns to the base (right).

