cann't elicit the seizure in other group of mouse. It has been explained by genetical nature for the seizure. Biochemical approach has been done towards the study of metabolism of this matter by several authors. In this paper, electrophysiological study is to be reported to analyse the seizure.

Four uncoated electrodes were fixed through skull onto various parts of cortex and recording was made bipolarly.

In the first, it is to be noted that characteristic spiky waves were found at rest in most of the case. In contrast no such spiky waves were found in the other group. Positional stimulus tended to increase in frequency but not in amplitude, although the convulsive seizure was not elicited at all in all series.

Next, electroencephalography correlation was made to analyse the effect of various anticonvulsive agents. Inhibition of the abnormal electrical activity was obtained by using phenobarbital, diphenylhydantoin and γ -aminobutyryl-histidine but not by γ -aminobutyric acid and γ -amino- β -hydroxybutyric acid.

Further attempt was done to explain the process of seizure alliviation in case of parabiosed ep-mouse with a mouse of other groups, which was previously reported by authors.

157. An Experimental Study for Discrimination of Epileptgenic Foci

—Studied with Penicillin Spike-focus on the Cat Brain—

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We have previously reported a clinical value of the intracarotid amobarbital injection for local discrimination of epileptgenic focus. The investigation was carried with cats, using topical application of Penicillin to produce epileptgenic spike-focus in the various parts of the brain. Amobarbital-sodium was administrated in the manner of intracarotid injection.

The reaction to the amobarbital injection was different by the localization of the focus, a clear supression of the spiking was observed by the ipsilateral amobarbital administration on the cortical focus but not on the subcortical focus, and an experimental basis for clinical usage of this method was demonstrated.