C6. Polygraphic Study of All-Night Sleep on Petit Mal Epilepsy.

—Especially the analysis about the transformation of
spike and wave complex in all-night recording—

S. TAEN, Y. TOKUDA, H. KAZAMATSURI, S. KIKUCHI
and M. FUJIMORI

Neuropsych. Dept., Tokyo Univ. School of Med.

This report was made on the polygraphic examination of 13 petit mal patients from six to twenty two years of age, in various stages of all night sleep.

The tests were recorded at full time by simultaneous and continuous records of electroencephalograph (8 channels), eye-movement, respiration-rate, pulse-rate (ECG) and galvanic skin-reflex (GSR).

The course of the changes involved and the mutual relation of each factor were observed dynamically. The methods and results were as follows 1) we divided the EEG sleep depth into four stages from the waking state to the deep sleep and set up two more stages called "stage-3 variant" and "stage-4 variant", and then we scrutinized the parallelism of each paroxysmal patterns to various sleep stages. 2) Type I (typical regular spike and wave complex) was found in waking state or drowsy state. Type II (irregular spike and wave complex (>3 sec)) or type III (irregular spike and wave complex (<3 sec)) and type IV (diffuse spikes) or type V (bilaterally localized spikes) were recorded in moderate sleep or deep sleep stage. 3) In stag-3 variant, we could not observe any more spontaneous paroxysmal pattern. The above reported facts seem to suggest that contributions to the epileptic discharges in petit mal deserve more penetrating study than has been done so far. About the puls-rate, respiration-rate, GSR and each other correlations we should report on other chances.

C7. Effect of Increased Body Temperature on Epileptic Seizure Discharge

—In relation to febrile convulsion—

Y. KASHIWASE, M. MIYASAKA and M. DATE

Dept. of Neuropsych., Tokyo Med. and Dent. Univ., School of Med.

It is well known that children are subject to convulsions more often than adults, particularly in their febrile state, and the children with febrile convulsions tend to develop epileptic seizures in their later life. The relation between increased body temperature and convulsions, however, has not been clarified yet.

We investigated the effect of the increased body temperature produced by