41. E.E.G. Abnormalities in Hyponatremia, appeared after Pituitary Stalk Section

Sakae FUKUDA and Kensuke KUROKAWA

Department of Neurosurgery, Shizuoka Red Cross Hospital

Takashi MIMURA

Department of Surgery, Shizuoka Red Cross Hospital

Nobuo YOSHII

Department of Neurosurgery, Keio University

48 year-old, female, with recurrent breast cancer, was performed radical mastectomy 13 years ago.

In March, 1967, pituitary stalk section was performed on the patient for the treatment of the recurrent breast cancer.

On 7th and 18th post operative day, loss of consciousness was appeared due to hyponatremia.

EEG tracings taken during second attack of unconsciousness, showed diffuse δ and θ waves in all areas with occasional β waves, particularly in frontal area. In both unipolar and bipolar leads, there disclosed slow waves of 30 to 80 μ V in left temporal area and of 15 to 30 μ V in right temporal area. All these tracings revealed the fact that right side is slower in frequency.

This unconsciousness disappeared rapidly after large amount of I-V saline solution. In following EEG taken on 7th, 20th, and 180th day after second attack there still noticed slow waves, although diminished in frequency gradually.

After 6 months, all EEG became within normal limits.

The slow wave focus in right frontal and temporal area were found through all tracings, but this may be due to the surgery.

42. Experimental Studies of Cerebral Hemodynamics during Intracranial Hypertension

Hajime NAGAI, Masahiro FURUSE, Muneyoshi KAYO, Yoshihiko OKA,
Mitsuo SUGIURA, Atsushi IKEYAMA, Shigeru MAEDA,
Michiaki HASUO and Shin HOSHIKAWA

2nd Department of Surgery, School of Medicine, Nagoya University

The relationship between intracranial hypertension and cerebral hemodynamics was investigated. Respiration, systemic blood pressure, cerebral blood flow by heat