to the level of the craniotomy of non-tumorous intracranial diseases.

These data show the interesting facts that adrenocortical over-response on the craniotomy of brain tumor cases are suppressed successfully.

Even when unusually high dosage of dexamethasone was given during the postoperative 7 days, lasting more than 4 weeks after the craniotomy, no apparent adrenocortical insufficiency was observed; normal reaction to the adrenocortical reserve test (response to ACTH-Z 40 I.U. for 3 days) and suppression test (response to the dexamethasone 2mg/day for three days) were observed as well.

38. Changes of Renal Function, Water and Electrolytes Following Cerebral Injury

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Correlation between both renal and endocrine functions, and cerebral injury divided into five groups, i.e. 1, 2, 3, 4 degrees and other sequelae is clarified through the measurement of G.F.R., R.P.F., F.F., N.P.N., Electrolytes in blood and urine, G.P.T. and G.O.T. in blood serum, and 17-O.H.C.S. and 17-K.S. in urine.

The results obtained are as follows;

- 1) getting lower of renal functions in parallel with severity of injury.
- 2) almost normal value of electrolytes in blood.
- 3) decrease of NaCl and increase of K discharged into urine early after injury.
- 4) rising of 17-K.S. and 17-O.H.C.S. in urine, and G.O.T. and G.P.T. in serum also early after injury.

Thus it is revealed that renal dysfunction runs parallel to the severity of cerebral injury associated with some affection of central nervous and endocrine system.