113 cases of all 210 administrations into our hospital in the period from June 1964 to August 1965 were emergent (53.8%), of which head injuries were 86 cases (76.9%) and others were only 26 cases (23.1%). Of all head injuries 30 cases were operated on, of which 4 cases were died, but 2 cases of these would have been relieved, if the patients were transferred smoothly to our hospital. All head injuries were classified to 51 cases of concussion type, 16 cases of laceration type and 11 cases of hematoma type, and of 11 cases of all acute intracranial hematoma epidural type was 4, subdural type 4, intracerebral type 2 and subdural intracerebral type 1. Analysis in age of patients of acute head injuries showed that the patient of age under 10 year-old was 55.1% and the patient of age over 40 year-old was rather low percentage. The cause of frequent occurrence of head injuries in the low aged children and infants was due to traffic accident and fall from height within the residence, and that especially the traffic accident was 55.1% of the causes of all head injuries. Of 26 non-traumatic emergency cases cerebrovascular lesion was 38.1% and this reason of high percentage of cerebrovascular lesion was because of being sent of unconscious patients from other hospital.

3. Acute Intracranial Hematoma, Report of 113 Cases

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Analysis of 113 cases of acute intracranial hematoma (34 extradural hematoma cases, 79 subdural hematoma cases) is reported. Mortality is 27% in extradural hematoma group and 77% in subdural hematoma group.

Prognosis of patients having subdural hematoma is quite poor, even if craniotomy is performed in early stage following lucid interval. Simple evacuation of clot alone can not save majority of patients with subdural hematoma. In those cases cause of death is brain swelling which is present with hematoma or appears after removal of clot. Therefore, treatment of cerebral swelling should be considered not only in severe cases but also in patients with slight consciousness disturbance in conjunction with operative therapy. Inhalation of oxygen, securing of airway, administration

of stroids and hypertonic solution such as mannitol and urea, and hypothermia should be commenced before operation and continued postoperatively.

In several cases of subdural hematoma, showing lucid interval, clot of small amount was noted at operation and cause of consciousness deterioration seemed to be brain swelling. In such cases, conservative treatment is preferred to surgery.

Since improvement in consciousness state was seen after treatment of brain swelling was done in patients having subdural hematoma of moderate size, better result might be obtained by performing operation after consciousness level rises by means of conservative measures in some cases.

In majority of present cases, cerebral angiography was not performed and hematoma was discovered by neurological examination and/or inspection burr hole technique. Since arteriography will be helpful to know not only location but amount of clot and to determine validity and time of operative intervention in subdural hematoma cases, it is better to make the test before operation, when subdural hematoma is suspected, unless deterioration of vital sign such as respiratory disturbance is present.

4. Increasing of the Subacute Stage Operations of Posttraumatic Intracranial Hematomas

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In the last two years cases of subacute intracranial hematomas increased predominantly in our hospital. Before admission in their subacute stage, almost all the patients had been in sensory disturbances, and mannitol, urea or other hypertonic solutions, occasionally combined with synthetic adrenocortical hormones had been administered to them by emergency doctors already in acute period. As generally accepted, the results were good in all the cases operated in subacute stage. General use of the hypertonics and other modern remedies for brain edema seems to be playing an important part as a causative moment of increasing of the subacute intracranial hematomas. Administration of the drugs brings good luck or not, that is the problem.