surgical procedures are necessary to rescue the life of patients. Accordingly, time-loss due to preparation for blood transfusion or complicated surgical procedures is the major factor which makes prognosis of epidural hematoma worse.

In our clinic, favorable results are obtained in cases of epidural hematoma by a surgical technique in which multiple circular openings of 4 cm in diameter are made closely to each other by the use of trephine to remove the hematoma. Hematoma is removed by aspiration or brain-spoon. Then, from two to four small holes of 3 mm in diameter are appropriately made around the above mentioned openings. The dura mater is hauled up and sutured to the edge of the cranial openings through these holes, being tightly compressed to the edge of the bone in the aim of hemostasis and preventing recurrence of hematoma. Depending on the spread of hematoma, incision of the skin is appropriately added and similar cranial openings are made, furthermore. When hematoma is removed and the dura mater is hauled up in this way step by step, duration of time for surgery is remarkably shortened and bleeding can be minimized to an extent in which blood transfusion is not required. After accomplishing the procedure of tenting of the dura mater, each circular bone flaps is placed in the position like a button. The skin has only to be sutured covering the cranial fragment in the position, and suture of the bone itself is not necessary.

It is assumed that, by this technique, surgical procedure can be carried out with ease very rapidly, with little possibility of recurrence of hematoma and sequesteration of the bone fragment.

145. On the Traumatic Intracerebral Hematoma

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The clinical analysis of symptom and sign of the traumatic intracerebral hematoma was done to establish the clinical diagnosis. The traumatic intracerebral hematoma divided into three types by the time appeared symptom after head injury, Type I is that symptom appeared within two days after injury, Type II is that five days and Type III is after ten days. The frequency of each type is 46.1%, 30.8% and 23.1%.

The symptom are different in these three types. The majority of Type I are changing of consciousness after interval and other cases are continuous state of somnolence and delirium or focal cerebral symptom after injury. Type II are somnolence or delirium after interval, or focal cerebral symptom meantime the
consciousness level getting up. Type III are changing of mental state or focal cerebral symptom with clear consciousness. The clinical diagnosis of traumatic intracerebral hematoma is not so difficult by above mentioned course of each type.

These three types showed different operative finding also and the type I is adjacent hematoma, the type II is central hematoma and type III is adjacent or central hematoma.

The angiographic evidence of traumatic intracerebral hematoma in frontal lobe is quite same with the tumor in this site and intracerebral hematoma in temporal lobe showed upward dislocation of middle cerebral artery with or without shifting of anterior cerebral artery to opposite side. The angiographic diagnosis of intracerebral hematoma in temporal lobe have to done carefully, because of lack of focal cerebral symptom and sign and the fact which has no shifting of anterior cerebral artery in 75%.

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146. Studies on Subacute Intra-cerebral Haematom

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Intra-cranial haematom is commonly experienced on the injury of the head. On increasing of these experiences, many atypical cases have been reported. On the diagnosis of these cases, cerebral angiography was more valuable than clinical symptoms. Sometimes, cerebral angiography must be achieved repeatedly if necessary.

7 out of 18 cases who received the operation of traumatic intra-cerebral haematom, were subacute. Immediately after the injury, their clinical symptoms and the findings of angiography did not show any abnormal signs. But, repeated angiography with follow-up observation suggested the existence of intra-cranial haematoma. Operation were done from 4 to 33 days after the injury. The regions of haematom were within the anterior lobe on 3 cases (one case of central type by Coup, two cases of adjacent type by Contre-coup), within the temporal lobe on 3 cases (one case of central type by Coup, two cases of adjacent type by Contre-coup), within the temporal lobe on 3 cases (two cases of central type and one case of adjacent type by Contre-coup), and within the antero-parietal lobe on one case (central type by Contre-coup). 4 out of these cases were accompanied with subdural haematom (each two cases of central and adjacent type).

Fracture of the skull was noticed on 4 cases. The site of haematom and