3) There was no close relationship between degree of new bone formation and the width of bone defect.

4) In craniectomised patients, new bone formation was less remarkable in the central portion of the bone defect in patients who had scar of scalp and injuries in dura, and was most remarkable in patients who had neither scar of scalp nor injuries in dura.

5) In the cases in which acrylic cranioplasty was done consistent relationship between new bone formation and conditions of scalp or dura was not found.

6) In many cases which had had bone defect in the frontal region, new bone formation was found at all ridges of the bone defect with same degree. In many cases which had had bone defect in the parietal region, new bone formation was found better at the temporal and the occipital ridge than the frontal and the parietal ridge. Pathological findings of regeneration at the bone defect was the same as roentgenological findings.

7) New bone formation was better at the temporal or the occipital region than the frontal or the parietal region.

The influences of the acrylic resin graft to the skull defect were discussed in the experimental studies on dogs.

In the cases using the resin graft, connective tissues produced on the dura were thicker and fibrosis was more remarkable than in the cases in which the bone fragments were removed.

In the clinical cases of depressed fractures, when the primary graft was impossible following the removal of bone fragments, it is advisable to observe the degree of bone regeneration described above and then to decide the indication of secondary cranisplasty.

In infants, the natural regeneration of the skull defect may be expected when local soft tissues and dura were in the good condition.

103. The Cerebral Artery Occlusion of the Head Injuries

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In the case of 110 head injuries (65 war injuries and 45 traffic injuries) there were 11 cases (10%) of the cerebral artery occlusion. In those 11 cases, 10 are not direct injuries and only one case is assumed to direct injury with the artery occlusion. The time of unconsciousness after injuries varies several minutes to one week (average 2.7 days).
The parts of the occlusion are 8 cases of anterior cerebral artery, and each one case of middle cerebral artery, middle cerebral combined with anterior cerebral artery, and internal carotid artery. Most of these arteries, except last one, occluded at the level of pars supra-optica.

The cases of middle cerebral, middle cerebral combined with anterior cerebral, and internal carotid artery occlusion present each characteristic focal signs. Eight cases of anterior cerebral artery occlusion show each different symptoms includes a case of hemiplegia. Pneumoencephalograms show mostly slightly heavy enlargement especially dominated in the same side of injuries. In the 11 cases, 5 patients had seizures and one of that shows interesting narcolepsy.

104. Four Cases of Carotid Artery Thrombosis, its Surgical and Medical Treatment

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It is a well-known facts that the carotid artery thrombosis in the neck caused occasionally the symptoms of cerebrovascular diseases. 4 case of carotid artery thrombosis are shown in this report.

No. 1. male, 52 years old
1-carotid artery thrombosis (transient and recurrent type)
treatment: removal of thrombosis and intimaectomy, medication of Indione, healed.

No. 2. male, 53 years old
1-carotid artery thrombosis (apoplectic type)
treatment: injection of Urokinase (fibrolytic enzyme) medication of Indione, healed.

No. 3. male 76 years old
r-carotid artery thrombosis (transient type)
treatment: stellate ganglionectomy, injection of Urokinase (fibrolytic enzyme), medication of Indione, healed.

No. 4. male, 58 years old
bil. carotid artery thrombosis (apoplectic type) only examined.
1) Not only the stenosis of carotid artery causes the symptoms, but also other factors, for instance, vasospasm, hypotension, embolism and also, relate with the episodes.
2) It is very important that the operative re-canalisation has to be indicated in proper timing.