

quarters of an inch internal to it, extending upwards, backwards and outwards for a distance of two and a half inches. At the bottom of this a fracture was detected in the bone. A small trephine operation was made over the region of the head and eye centres, that is, the posterior part of the mid-frontal convolution. The dura mater was opened, but no pronounced bleeding was seen, except a general slight oozing. The bone was not replaced, but the scalp was sutured, the head dressed and the patient returned to bed.

The operation was carried out more for the relief of pressure than in the expectation of finding a large bleeding point, for the localized symptoms, retraction of the head, neck and eyes, the rigidity of the right side and the external squint on the left were not altogether sufficient signs in themselves to give a definite localization where it would be advisable to operate. A small trephine operation was carried out, as recommended by Coker and Cushing, in the hope of relieving intercranial pressure, and thereby arresting the hæmorrhage.

The patient made a good recovery from the anæsthetic and operation, slept well that night, and had no return of the convulsions. Next day he was perfectly conscious, the rigidity of the limbs disappeared completely, and in ten days he left the hospital.

The interesting points in this case were that the patient, after being three hours in the hospital, did not show any particular symptoms pointing to a serious cerebral injury more than the semi-comatose condition, the hæmorrhage from the nose and mouth, and the slight rigidity. As the pulse and respirations were good and paralysis absent, one hesitated in recommending an operation. Dr. Armstrong's probable diagnosis was that of fracture of the anterior fossa of the cranium, associated with possible hæmorrhage in the middle meningeal artery, giving the deepening coma as his reason for the latter hypothesis. The lumbar puncture revealing the presence of blood in the cerebral spinal fluid pointed to cerebral laceration being present. The second point of interest was the obtaining of blood in the lumbar region in such a short interval after the accident, which shows the rapidity with which the blood can pass from the cerebral cortex to the lumbar region. Third, the remarkable relief of symptoms upon the removal of a small circular piece of bone and opening up the dura. Fourth, marked improvement in the conditions within a few hours and the drop of the blood pressure—which was never very high—from 175 to 120. Fifth, this case, like the other I have discussed, points to the advisability of operating early for the relief of pressure; for we see, as mentioned in the early part of my paper, how, if pressure is allowed to continue long, degenerative changes take place in the neurones, with the result that recovery is protracted, and last but not least, the tendency is,