

## SURGERY.

IN CHARGE OF

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### SURGICAL TREATMENT OF INTRACRANIAL TUMORS.

Prof. W. W. Keen contributes a paper with this title to the *International Medical Magazine*, of March, which is replete with valuable suggestions. With reference to method of opening the skull proposed by Doyen—to make an osteoplastic flap of the entire side of the skull—he states that while it will greatly simplify the treatment of tumors, it is doubtful whether so extensive a temporary resection will stand the test of time. The mode of access to the tumor, if Doyen's method is not followed, is either by the ordinary method of trephining, using not less than an inch and a half trephine, and making either a single or multiple trephine openings, which may be later connected by sawing or gnawing away the intervening bridges of bone, or by various methods for making the usual temporary osteoplastic resection.

The skull being opened, we may follow one of two courses. First, especially if the tumor is small, we may proceed with its extirpation and the closure of the wound, or secondly (and this is especially applicable to tumors of large size), the first part of the operation may be terminated so soon as the brain is exposed and the hemorrhage checked. The wound is then temporarily closed, and the remainder of the operation is completed after the lapse of from three to six days. In large tumors, the author advises that the operation should be divided into two stages. Hemorrhage and shock, the two principal dangers in connection with the removal of cerebral tumors, are thus minimized. It has, however, the disadvantage of a possible infection.

The control of hemorrhage is one of the most difficult problems in connection with the removal of cerebral tumors. Hemorrhage from the diploë is easily controlled by Horsley's antiseptic wax. For hemorrhage from the vessels of the meninges the ligature is an efficient means of control. If the dura be cut and an artery bleeds, the cut end can be tied just as any other vessel. If it be necessary to ligate the vessel in its continuity in a dura unopened, though with torn vessels, it can be secured by passing a fine silk thread by means of the finest semicircular Hagedorn needle under the dura and around the vessel, care being taken not to wound the underlying cerebral veins themselves. For venous hemorrhage, the best method, also, is the ligature. Rarely can the vessel be seized by the forceps and a ligature applied. The best method again is by the semicircular needle of suitable size, to pass a silk or catgut liga-