Abstracts

hydrocephalus. TAE was performed under local anesthesia in all cases, using a coil alone in two cases and liquid or particle embolization material in five cases. The day before direct surgery, TAE was performed in four cases, one of which involved surgical resection for precentral gyrus glioma. Glioma grades for 27 patients were Grade II in 6 cases, Grade III in 7 cases, and Grade IV in 13 cases. 11 patients were recurrent glioma cases and glioma grade for these patients were Grade II in 4 cases, Grade III in 3 cases, and Grade IV in 4 cases. Extent of resection for 27 patients was biopsy in 2 cases, partial resection in 16 cases, and more than 90% of resections in 9 cases. 6 patients underwent awake surgery and glioma grade for those patients were Grade II in 3 cases, Grade III in 2 cases, and Grade IV in 1 case. Median extent of resection for patients who underwent awake surgery was 90%. Transient neurological worsening was observed in 5 patients, however, no patient exhibited permanent neurological deficit. Surgical resections for primary motor cortex glioma were feasible in selected patients without severe neurological complication. Careful intraoperative awake mapping is desirable to achieve maximum resections.

STMO-07
ADVERSE EVENTS RELATED TO THE GLOBLASTOMA SURGERY AND THEIR PERIOPERATIVE MANAGEMENT IN OUR HOSPITAL
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BACKGROUND: The standard treatment for glioblastoma is surgical resection following chemoradiation therapy. The rate of removal or the amount of residual tumor has some impact on the prognosis of patients with glioblastoma, but the highly invasive nature of this tumor makes complete removal limited to the contrast-enhanced lesions difficult due to its localization. Furthermore, when postoperative seizures and venous thrombosis are included in surgery-related complications, these perioperative adverse events can cause delays in the initiation of chemoradiotherapy and delay the return to work and home, such as prolonged hospitalization and rehabilitation time.

METHODS: We retrospectively reviewed the perioperative status of the recent 50 consecutive cases with histologically confirmed as glioblastoma at our hospital, the patient background, tumor localization, and perioperative treatment, and so on.

RESULTS: The major perioperative complications were ischemic or hemorrhagic complications, epileptic seizures, venous thrombosis, and pneumonia; CTCAE grade 2 or higher, grade 3 or higher, and grade 4 occurred in about 40%, 20%, and 10%, respectively, with some patients having multiple complications.

DISCUSSION: Although there was a tendency for ischemic changes around the cavity of the resection as the resection rate increased, most cases were asymptomatic and it seemed to be acceptable if residual brain function could be preserved. Residual tumors tended to show hemorrhagic changes and epileptic seizures because this is thought to be that the tumor was deliberately left in place to preserve function, based on the localization of the tumor. Postoperative FDF levels were useful in predicting the development of deep vein thrombosis and pulmonary artery thromboembolism.

CONCLUSION: Because glioblastoma has short survival time and patient PS before and after surgery varies greatly depending on tumor localization, it is important to consider risk-benefit strategies for each case and to establish a scheme for a seamless transition from perioperative management to the introduction of postoperative therapy and maintenance therapy.