

On the issue of surgical methods for the treatment of dislocation syndrome in supratentorial brain tumors.

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Abstract: *In this work, we present the results of our own retrospective studies, the material for which was the case histories and the results of surgical treatment of 43 patients with supratentorial brain tumors with dislocation syndrome. The surgical approach varied depending on the location, volume of formation, general condition of the patient and the degree of dislocation of the brain.*

Key words: *supratentorial brain tumors, dislocation syndrome, surgical treatment, outcome.*

Relevance.

Neuro-oncology is one of the most complex areas of modern neurosurgery. Among all neoplasms of the human body, brain tumors range from 1.6% to 2.5%. Among brain tumors, glial tumors of the large hemispheres range from 37.3% to 56.5% [1]. By localization, tumors of the frontal lobe – 19.7%, temporal lobe - 21.1%, parietal lobe - 9.3% and cerebellar tumors - 15.1%, brain stem tumors - 2% of cases.

Treatment of glial brain tumors is one of the most difficult problems not only in modern neurosurgery, but also a social problem. This is due to the fact that this pathology occurs most often at a young, able-bodied age - from 20 to 45 years. The choice of therapeutic tactics for brain tumors of various histological structures is considered quite difficult [3]. The choice of therapeutic tactics, method and method of surgical intervention predetermine the biological properties of the tumor. The choice of the method and method of surgical intervention, the postoperative state is also influenced by the stage of the clinical course of the tumor process [2]. In order to improve the results of surgical treatment, scientists have developed combined methods of treatment, including chemo- and radiation therapy [4]. Despite this, the postoperative mortality of patients with brain tumors remains high and amounts to 2.7 - 11% of cases. Postoperative survival of patients ranges from 1 to 5 years [1].

The aim of the study is to improve the results of differentiated surgical treatment of patients with dislocation syndrome in brain tumors.

Material and methods of research.

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A retrospective analysis of the results of surgical treatment of 43 patients with brain tumors who were in the neurosurgical department of the Andijan branch of the RNCMP from 2014 to 2018 was carried out. The age of patients is from 20 to 60 years. In the distribution by gender: men - 14 and women – 29 patients.

In the preoperative period, all patients underwent clinical neurological and instrumental research methods. In all the examined patients, general cerebral symptoms and signs of damage to the corresponding hemispheres of the brain were revealed by the type of hemisymptomatics.

According to the stage of the disease in the compensated state - 29 patients, subcompensation - 10 and decompensation – 4 patients.

MSCT and MRI studies of the brain were performed, which made it possible to accurately determine the localization, size, depth and relationship of the tumor with the surrounding brain tissues before the operation. Also, in 11 cases, signs of brain dislocation were revealed.

Based on the obtained research data, an operation plan was drawn up before the operation, taking into account the stage of the disease and the degree of dislocation of the brain:

1. Bone-plastic trepanation of the skull, total /subtotal removal of the tumor (compensated stage of the disease) - 29 patients.
2. Decompressive bone resection trepanation of the skull, total/subtotal removal of the tumor (subcompensation stage) - 10 patients.
3. Decompressive bone resection trepanation of the skull (decompensated stage) – 4 patients.

Results and their discussion.

When patients were admitted to the hospital in a compensated stage and without signs of brain dislocation, total removal of the hemispheric tumor was performed in 23 patients, subtotal removal in 6 patients. In patients admitted at the stage of subcompensation and with the presence of initial signs of brain dislocation, all 9 patients were treated. In patients at the stage of decompensation and the presence of gross signs of dislocation and infringement of the trunk, only decompressive trepanation of the skull was performed. The purpose of the operation in this case was to eliminate the signs of brain injury.

The results of the surgical treatment showed that the degree of compensation has a significant impact on the outcome of the operation and on the further quality of life of patients. In patients of group 1 operated at the compensation stage, regression of neurological symptoms was observed in 78% of patients, the postoperative period proceeded without complications.

In group 2 patients admitted at the subcompensation stage, good and satisfactory clinical results were registered in 63% of patients.

In patients operated at the stage of decompensation with pronounced signs of brain dislocation, a satisfactory result was noted only in 1 (25%) patient, the remaining 3 patients had a fatal outcome.

Conclusions.

1. Based on the conducted research and treatment of patients, it can be concluded that obtaining good and satisfactory results depends on the time of treatment and the stage of the disease.

2. Localization, size and degree of tumor growth have a significant impact on the severity of cerebral, focal symptoms and brain dislocation.

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