



Complex Treatment of Patients with Parasagittal Meningiomas

Davron Ravshanov

Assistant in Neurosurgery Department Samarkand State Medical University, Samarkand Uzbekistan

DOI: <https://doi.org/10.55248/gengpi.2023.4119>

In the English-language literature, parasagittal (PSM) meningiomas associated with the superior sagittal sinus (SCS) are called, most Russian authors include tumors associated only with the crescent of the brain in this group. The issue was considered in detail in the publication of the fourth author [1-3], in this study we consider only SCC meningiomas as more difficult for radical removal.

Meningiomas are the most common primary CNS tumors (37.2%), their incidence is 8.33 per 100,000 population per year [4, 5]. The proportion of SCI among all meningiomas has not been specified, since the exact localization of the meningeal tumor is not taken into account in existing registries, and publications reflect the material of specific clinics, and even within the same clinic, the ratio may change over time [6-9]. Based on our experience at the end of the last century, it can be assumed that SCI account for approximately 28% of intracranial meningiomas [10, 11] and their incidence is 2.33 per 100,000 population per year, i.e. exceeds the incidence of tumors of the cranial and spinal nerves (1.89 per 100,000 population per year) [12]. In addition to a fairly high incidence rate, the relevance of the problem of SCI is due to the complexity of topographic and anatomical relationships in the parasagittal region and, first of all, the presence of critically significant venous structures there. An increase in the radicality of the operation due to reconstructive interventions on the SCD, according to our data, is accompanied by a twofold increase in morbidity [14-18], and, according to the literature [19], and deaths. A reasonable restriction of radicality provides better functional results, but increases the risk of tumor recurrence, ranging from 25% [20, 21] to 62% [22-24]. In recent decades, methods of stereotactic radiosurgery and radiation therapy have been developed and put into practice, providing comparable results. However, since neurosurgery and radiation treatment are performed by representatives of different medical specialties, many publications lack a full comparison of the advantages and disadvantages of surgical and radiation methods. There is no recognized algorithm for choosing the optimal method of complex treatment of patients with SCI.

The analysis of the literature showed that an increase in the radicality of removal of the SCM is accompanied by an increase in the number of complications, but does not necessarily lead to a decrease in the risk of tumor recurrence. Stereotactic radiosurgery and, to a lesser extent, stereotactic radiotherapy provide better results in controlling the growth of meningioma compared to microsurgery, but as the volume of the irradiated target increases, the number of complications increases, especially with parasagittal localization of the process. The way out of this collision seems to be complex treatment - the maximum possible removal of the tumor without damage to functionally significant structures, including the venous outflow tract, followed by radiation treatment for tumor remnants. An algorithm for choosing the tactics of treating patients with SCI (surgical, radiation or combined), choosing the best radiation method, the number of fractions and doses is not presented in the literature.

References

1. Juraev, A. M. "TO THE QUESTION OF COMPLEX TREATMENT OF NEUROEPITHELIAL TUMORS OF THE BRAIN." *Достижения науки и образования* (2022): 120.
2. Juraev, A. M. "TO THE PECULIARITIES OF THE COURSE OF CEREBELLAR TUMORS Juraev AM." *Достижения науки и образования* (2022): 118.
3. Abdukholikovich, Aliev Mansur. "ANALYSIS OF CHANGES IN THE FIELD OF VISION IN PATIENTS WITH BRAIN TUMORS." *Достижения науки и образования* 6 (86) (2022): 78-81.
4. Mamatkulovich, MamadalievAbdurakhmon. "RESULTS OF ANALYZING NEUROLOGICAL SYMPTOMS IN ACUTE AND LONG-TERM PERIODS OF BRAIN CONCUSSION IN 63 PATIENTS." *Достижения науки и образования* 6 (86) (2022): 27-29.
5. Mamatkulovich, MamadalievAbdurakhmon. "RESULTS OF OPHTHALMOLOGIC MEASURES IN NEUROONCOLOGY PATIENTS." *Достижения науки и образования* 6 (86) (2022): 29-31.
6. Husanov, Z. T. "SOME ASPECTS OF COMBINED TREATMENT OF GLIAL BRAIN TUMORS Husanov ZT." *Достижения науки и образования* (2022): 98.

7. Aliev, M. A., A. M. Mamadaliev, and S. A. Mamadalieva. "Research of essential elements composition in the cerebrospinal fluid in patients with outcomes of traumatic brain injury." *Міжнародний науковий журнал* 9 (2015): 17-23.
8. Mamatkulovich, MamadalievAbdurakhmon, and Aliev Mansur Abdukholikovich. "The Correlations of Clinical-Neurological Signs with The Different Outcomes of Traumatic Brain Injury and their Prognostic Important." *Medical Research Archives* 10.9 (2022).
9. Алиев, М., А. Мамадалиев, and С. Мамадалиева. "Принципы комплексных усовершенствованных нейрохирургических методов лечения у больных с посттравматическими хроническими субдуральными гематомами и гидромами." *Журнал проблемы биологии и медицины* 2 (87) (2016): 19-23.
10. Abdukholikovich, Aliev Mansur, MamadalievAbdurakhmonMamatkulovich, and MamadalievaSaodatAbdurakhmonovna. "The study of the results of endolumbal insufflation of ozone and pyracetam in the treatment of posttraumatic epilepsy." *European science review* 11-12 (2015): 29-32.
11. Abdukholikovich, Aliev Mansur, MamadalievAbdurakhmonMamatkulovich, and MamadalievaSaodatAbdurakhmonovna. "The study of the improved complex neurosurgical treatment in patients with posttraumatic chronic subdural hematomas and hygromas." *European science review* 1-2 (2016): 28-32.
12. Алиев, Мансур Абдухоликович. "АНАЛИЗ МЕТОДОВ ДИАГНОСТИКИ И ВЫБОРА ОПЕРАТИВНЫХ ДОСТУПОВ ПРИ РАЗЛИЧНЫХ ОПУХОЛЯХ СПИННОГО МОЗГА." *Достижения науки и образования* 6 (86) (2022): 76-78.
13. Abdukholikovich, Aliev Mansur. "ANALYSIS OF CHANGES IN THE FIELD OF VISION IN PATIENTS WITH BRAIN TUMORS." *Достижения науки и образования* 6 (86) (2022): 78-81.
14. Mamadaliev, A. M., and M. A. Aliev. "The Importance of the Duration Disorders of Consciousness to Prognosis of the Outcome of Cranio-Cerebral Trauma." *Proceedings of XIV WFNS Congress, Boston, USA*. 2009.
15. Aliev M. A., Mamadaliev A. M. Study of Efficacy of EndocystalOzonotherapy in the Operative Treatment of Posttraumatic Arachnoidal Cysts //Proceedings of XV WFNS Congress,(FA0754)., Seoul, Korea. – 2013. Aliev M. A., Mamadaliev A. M. Study of Efficacy of EndocystalOzonotherapy in the Operative Treatment of Posttraumatic Arachnoidal Cysts //Proceedings of XV WFNS Congress,(FA0754)., Seoul, Korea. – 2013.
16. Aliev, M. A., and A. M. Mamadaliev. "Macronutrient composition of biological media in patients with post-traumatic cerebral arachnoiditis." *Proceedings of VIII All-Russian Scientific-Practical Conference "Analytical reliability and diagnostic value of laboratory medicine," Journal of Laboratory*. No. 1. 2013.
17. Aliev, M. A., A. M. Mamadaliev, and S. A. Mamadalieva. "The effectiveness of endolumbal insufflation of ozone and pyracetam in the treatment of posttraumatic cerebral arachnoiditis." *Международный научно-исследовательский журнал* 10-4 (41) (2015): 45-51.
18. Bakhritdinov B.R, Aliev M.A, &Mardieva G.M. (2022). MULTIVOXEL MAGNETIC RESONANCE SPECTROSCOPY IN THE DIAGNOSIS OF BRAIN TUMORS. *World Bulletin of Public Health*, 8, 149-156.
19. Mamadaliev, A. M., et al. "By studying the composition of macronutrients are in biological media in post-traumatic cerebral arachnoiditis." *Abstracts of 10th Russian Scientific-Practical Conference of "Polenov reading's", St. Petersburg, Russian Federation*. 2011.
20. Mamadaliev, A. M., M. A. Aliev, and K. Dj Saidov. "The Research Of Different Methods Efficiency Of Posttraumatic Valve Defects Plasty." *European Journal of Molecular & Clinical Medicine* 7.03 (2020): 2020.
21. Алиев Мансур Абдухоликович, and Мамадалиев Абдурахмон Маматкулович. "Study of changes of macro- and microelements composition in the cerebrospinal fluid in patients with consequences of craniocerebral trauma" *European research*, no. 9 (10), 2015, pp. 95-101.
22. Aliev, M. A., A. M. Mamadaliev, and S. A. Mamadalieva. "Research of essential elements composition in the cerebrospinal fluid in patients with outcomes of traumatic brain injury." *Міжнародний науковий журнал* 9 (2015): 17-23.
23. Aliev, Mansur Abdukholikovich, and AbdurakhmonMamatkulovichMamadaliev. "Study Of Clinical And Neurological Changes In Patients With Different Outcomes Of Traumatic Brain Injury After Endolumbar And IntracystalOzonotherapy." *European Journal of Molecular & Clinical Medicine* 7.03 (2020): 2020.
24. Aliev, M. A., et al. "Use of Magnetic Resonance Spectroscopy for the Diagnosis of Brain Tumor Recurrence." *Journal of Applied Spectroscopy* 89.5 (2022): 898-904.