

Abstracts

P12.06. INTRAVENTRICULAR BRAIN TUMORS: PECULIARITIES OF SURGICAL TREATMENT

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INTRODUCTION: Intraventricular brain tumors account for approximately 10% of all tumors of the central nervous system. Despite the fact that some of these tumors are aggressive high grade lesions, most of them are histologically benign and potentially curable after surgical resection. Considering the slow growth of these tumors, for a long time these lesions remain clinically asymptomatic, until they reach significant size, which makes surgical removal technically difficult. The aim of the current study was to identify patterns of results of surgical treatment of patients with intraventricular tumors, depending on the lesion location and its degree of differentiation. **MATERIAL AND METHODS:** A retrospective analysis of 54 consecutive surgical interventions on intraventricular brain tumors that were treated at the Uzhhorod Regional Clinical Center of Neurosurgery and Neurology in the period from

January 2004 to February 2014. Localization of tumors was as follows: the fourth ventricle - 32 (59%), third ventricle - 13 (24%), lateral ventricles - 9 (17%). Neurological symptoms due to increased intracranial pressure was a common clinical manifestation of tumors for all patients. We used the following surgical approaches: suboccipital craniotomy for tumors of the fourth ventricle, transcallosal or transcortical-transventricular approach to the third ventricle and transcortical approach to lesions of lateral ventricles. Histological structure of the tumors: ependymoma - 13 (24%), astrocytoma - 12 (22%), medulloblastoma - 8 (14.0%), colloid cyst - 7 (13.0%), choroid plexus papilloma - 6 (11%), meningioma - 3 (6%), choroid plexus carcinoma - 1 (2%), teratoma - 1 (2%), central neurocytoma - 1 (2%), dermoid cyst - 1 (2%), chordoid glioma of the third ventricle - 1 (2%). The degree of tumor differentiation: grade I-II - 37 (69%), grade III-IV - 17 (31%). **RESULTS:** According to the data, among intraventricular tumors prevail the tumors of the fourth ventricle (59%), the most frequent histological type - ependymoma (24%). The total tumor removal was achieved in 38 patients (70%), of whom in 33 (87%) the degree of tumor differentiation was grade I-II. Postoperative mortality was 9% (5 patients), of which 4 (80%) - with the localization of the tumor in the third and fourth ventricles. The results of treatment were assessed according to Karnofsky scale: more than 60 points - 46 (85%) patients. **CONCLUSIONS** Acceptable results of surgical treatment of intraventricular brain tumors are in direct dependence from the tumor localization and its histological structure. The most unfavorable factor is the localization of tumors in close proximity to the brainstem and the low degree of tumor differentiation.