

Objectives of the study was to investigate the causes of postoperative subcutaneous accumulation of cerebrospinal uid (CSF), improvement of techniques of surgical wound sealing, and the development of a clear algorithm for therapeutic manipulation aimed at eliminating this complication.

Methods. During the period from 2007 to 2019 at the Neurosurgery Department of Kyiv Emergency Hospital 196 patients (207 operations) with skull base meningiomas were treated. 88 patients had anterior meningiomas, 73 patients had medium and 36 patients had posterior fossa meningiomas. The patients' age ranged from 17 to 74 years (mean age 45 years). There were 107 (54.3%) males and 90 (45.7%) females. In order to seal the dura mater for small defects pericranial aps and aponeurosis fragments as well as muscle and fat tissue fragments and monocomponent medical cyanoacrylate glues as Sulfakrilat and Epiglu were used.

Result. We analyzed the data of 161 observations of postcranial fossa and medium fossa meningiomas. Subaponeurotic CSF accumulation in the early postoperative period was revealed in 32 (19.8%) patients. Thirty-two patients had anterior fossa pseudomeningocele eliminated spontaneously. The inclusion criterion was the presence of subcutaneous CSF accumulation since 2nd day by imaging and palpatory data. The paper analyzed the main causes of subaponeurotic CSF accumulation after surgery. Features of soft tissue apping, craniotomy, resection and sealing of the dura, suturing the surgical wound were important for its prevention. The paper determines the basic methods for medical and surgical correction of complications following as: a pressure bandage, percutaneous aspiration of cerebrospinal uid syringe, the use of elastic bandages, hypodermic and lumbar drainage, wound revision and sealing.

Conclusion. 1. The main reasons for meningocele in the early postoperative period were increased pressure of cerebrospinal uid and dura mater defect. 2. Even with careful suturing wounds using known methods for dura mater sealing, in the area of craniotomy subaponeurotic accumulation of uid can occur, mostly in the frontal area due to the elasticity of soft tissue grafts and lack of muscle layer. 3. Pseudomeningocele in the early postoperative period requires all necessary surgical and medical methods for this complication early removing.

KEYWORD: meningioma; skull base; subcutaneous accumulation of cerebrospinal uid; pseudomeningocele.

40. Supratentorial epidermoids and dermoidal cerebral tumors. Preoperative diagnosis and surgical treatment: literature review and own observations analysis

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Background. Intracranial epidermoids and dermoid tumors are benign congenital neoplasms. They account for 1% of all intracranial tumors. At the same time, intracranial epidermoid/dermoid tumors make less than 2% of all epidermoid/dermoid tumors of a human organism. Presence of secondary skin material (hair, oil glands) in dermoid tumor sac is the difference between dermoid tumor and epidermoid.

Epidermoids to dermoids ratio varies from 4:1 to 10:1. Supratentorial intraparenchymal epidermoid and dermoid tumors most often manifest themselves in convulsive seizures and general weakness. The purpose of surgical treatment is a total removal of tumor and its sac.

The aim of our study. Determine special characteristics of disease course and surgical methods of supratentorial epidermoid and dermoid brain tumors removal.

Methods. Scientific literature for the last 10 years was reviewed. Results of examination and treatment of 3 patients, who underwent open surgery in Dnipropetrovsk Mechnikov Regional Hospital from 2012 to 2019 inclusive, were analyzed. Magnetic-resonance brain imaging was performed preoperatively for all patients in the following modes: T1 with and without intravenous enhancement, T2, FLAIR, DWI. All surgeries were performed by the second author. In order to select an optimal access, brain HCT angiography was performed in all cases, the results of which were used in preoperative planning and neuronavigational surgery support (Brain Lab navigation).

Results. 2 men and one women were examined and operated. Patient age ranged from 18 to 34. In 2 patients, tumor diameter exceeded 6 cm, while in 2 cases tumors extended to the brain ventricular system. In patient 1, brain MRI revealed a large tumor (epidermoid) of both frontal lobes, which extended on both sides of superior sagittal sinus and into rhino-olfactory groove and caused behavior, memory, and coordination disorders and convulsive seizures. Patient 2 had a large tumor (epidermoid) of right temporal, parietal, and occipital lobes, which extended to lateral ventricle and caused left-side hemianopsia, hemihypesthesia, and severe hypertensive syndrome. In patient 3, a tumor (dermoid) was located in mediobasal sections of right-side frontal and temporal lobes, extended to temporal horn of lateral ventricle, and caused generalized convulsive seizures. In all 3 cases, total microsurgical tumor removal was performed, which, in one patient (case 3), was supplemented with endoscopic assistance (Carl Storz). All patients had regression of neurologic symptoms in early postoperative period. Pre- and postoperative digital perimetry also confirmed correctness of selected access and atraumaticity of tumor removal in case 2. Catamnesis was tracked for 2 months to 7 years.

Conclusion. Thorough neuroimaging examination of patients and preoperative planning of all surgery stages allows to determine tumor nature preoperatively and completely remove it with preservation of patient's quality of life.

KEY WORDS: epidermoid tumors, dermoid tumors, surgical treatment, preoperative diagnosis, quality of life.

41. Peculiarities of symptomatology and clinical course of the disease in patients with metastatic tumors of subtentorial localization

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Background: Therapeutic tactics in patients with metastatic tumors of the subtentorial localization (MTSL) remain a complex and debatable issue in modern neuro-oncology.

Objectives: To determine the efficacy of treating patients with MTSL depending on the timing of their detection.