

Abstracts

P12.07. EPIDERMOID AND DERMOID CYSTS OF THE CENTRAL NERVOUS SYSTEM: SURGICAL RESULTS

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INTRODUCTION: Epidermoid and dermoid cysts of the central nervous system are usually developmental, benign tumors that arise when retained ectodermal implants are trapped by two fusing ectodermal surfaces. Together they compromise 1 - 1.5% of all brain tumors. Epidermoid cysts consist solely of layers of stratified squamous epithelium and localize more laterally (lateral sulcus, cerebellopontine angle (CP-angle)). Dermoid cysts also include dermal appendage organs (hair follicles and sebaceous glands). Unlike epidermoids, they are placed in the midline (suprasellary, IV ventricle). The aim of the current study was to define the clinical course and results of surgical treatment of dermoid and epidermoid cysts, depending on their location and tumor type. **MATERIALS AND METHODS:** A retrospective analysis of 16 consecutive surgical interventions on brain epidermoids and dermoids (4

dermoid cyst, 12 - epidermoid cysts), that were treated at the Uzhhorod Regional Clinical Center of Neurosurgery and Neurology in the period from January 2009 to February 2013. The distribution of patients by gender and age: men - 9, women - 7; mean age of patients - 30.1 years. Localization of the tumours was as follows: epidermoids (cerebellopontine angle - 6 patients, lateral sulcus - 4 patients, parietal lobe and spinal cord - 1 patient each); dermoid cysts (suprasellary - 3 patients, IV ventricle - 1 patient). **RESULTS AND DISCUSSION:** In the clinical picture of 7 patients the dominant symptom was focal neurological deficit (paresis of the extremities, dysfunction of cranial nerves), 6 patients presented with seizures and 3 patients with occlusive hydrocephalic syndrome. Hydrocephalic-occlusive syndrome dominated the clinical picture in 2 patients with CP-angle epidermoid and in patients with dermoid cyst of the IV ventricle. 13 patients underwent total removal of dermoid and epidermoid cysts, which was confirmed by control MRI, in 3 - a small part of the tumor capsule, closely linked with one of the large vessels of the brain (middle cerebral artery, basilar artery, posterior cerebral artery), was left. 14 of 16 patients (88%) noted improvement immediately after surgery. In 1 patient with epidermoid cyst of CP-angle there was new neurological deficit after surgery, that totally resolved after ventriculoperitoneal shunting. The median follow-up of the study was 3.1 years. The results of the treatment were assessed according to Karnofsky scale: more than 60 points - 16 patients. **CONCLUSIONS:** The only effective treatment for epidermoid and dermoid tumors is surgical removal. Careful microsurgical removal of these tumors can achieve satisfactory results and long-term remission. There is no influence of tumor localization on surgical results of the treatment.