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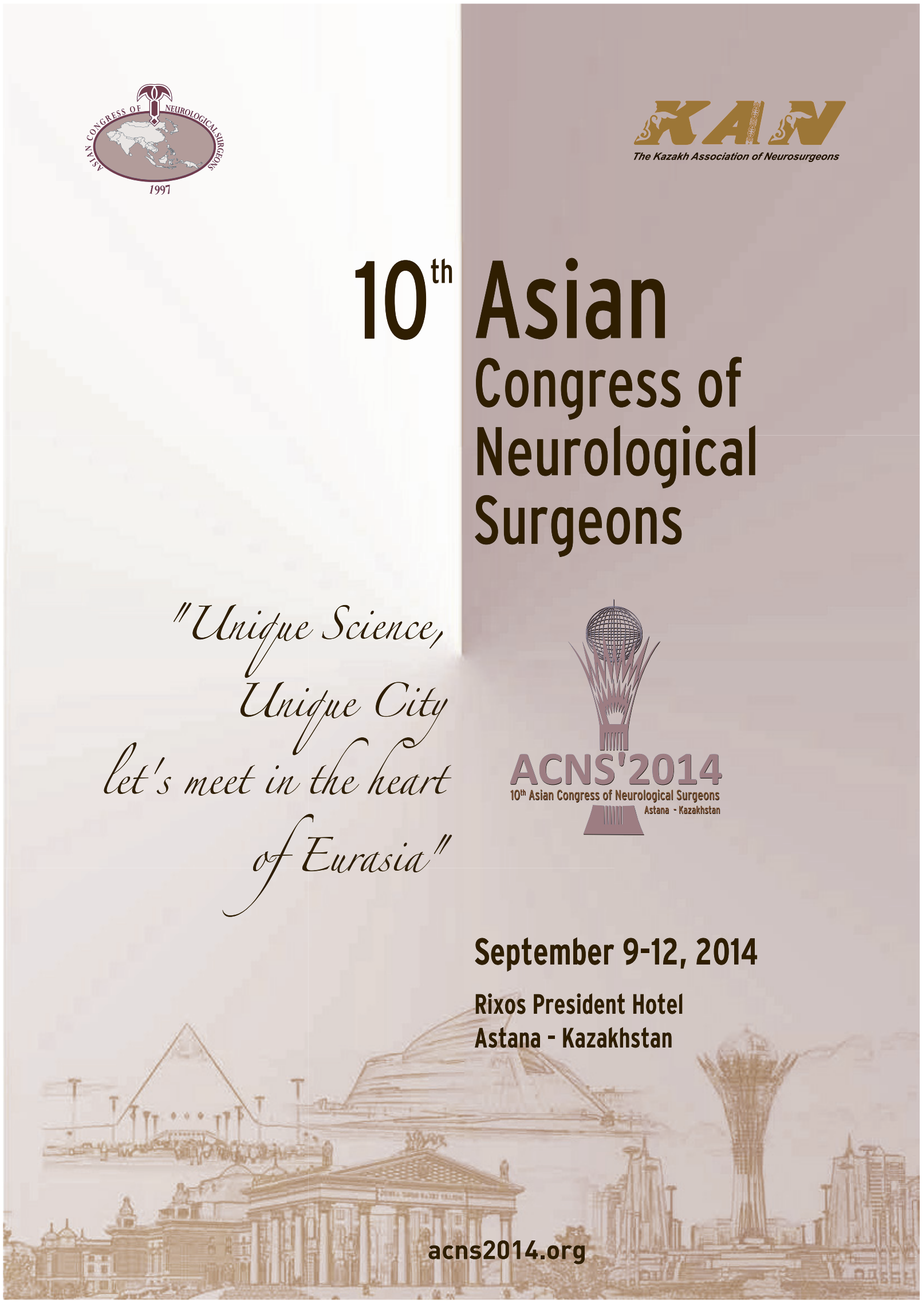
МАТЕРИАЛЫ X АЗИАТСКОГО КОНГРЕССА НЕЙРОХИРУРГОВ

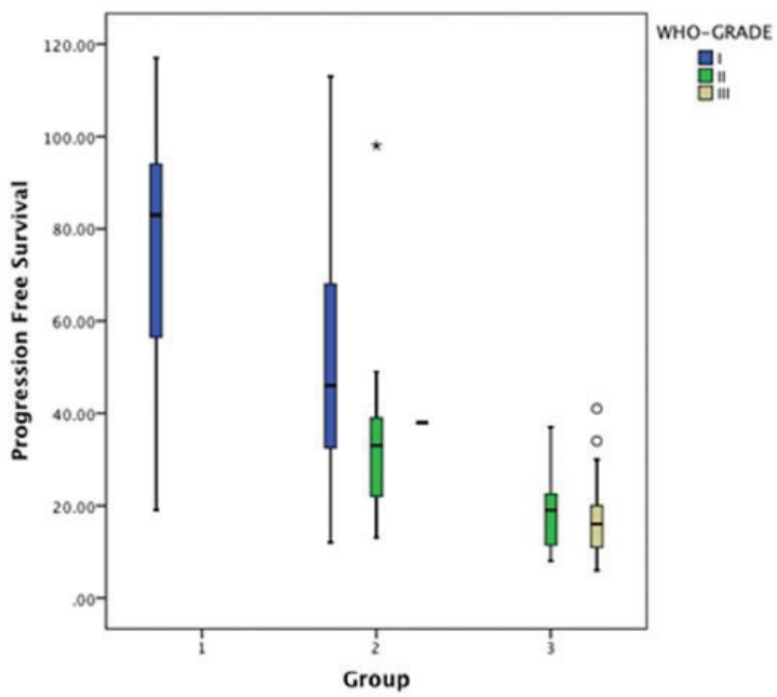


all patients were then classified into three groups. The survival, recurrence and recurrence free survival time (RFS) was analyzed

RESULTS: The hyperintensity on DWI, disruption of arachnoid layer and PTE on T2-weighted MRI, heterogenicitiy on T1-weighted gadolinium enhanced MRI and irregular shape of the tumor were all independent predictors of non-grade I meningioma and recurrence. The mean follow-up period was 94.6 months (range12-117 months). The mean overall survival and PFS in groups-I, II and III was 114.1±1.2 and 115.7± 0.8, 88± 3.3 and 58.5±3.9, 43.2± 5.1 and 18.2±1.7 months respectively. The MRI grading system signifi antly predicted unfavorable survival (P=0.02,OR= 3.1,CI=1.16-8.4) and recurrence (P=0.001,OR=6.5,CI=2.1-19.5). Group-II (P<0.001,OR-15.7,CI–4.9-50.1) and group-III (P<0.001,OR–151.2,CI- 37.8-604.2) predicted unfavorable outcomes.

CONCLUSIONS: The proposed scoring system predicted survival and recurrence outcomes for convexity meningioma. Group-I meningioma demonstrated benign radiologic, histopathologic and clinical behavior; group-III meningioma demonstrated aggressive behavior. Group-II meningioma might be considered intermediate and need for more aggressive management should be further investigated.

Figure



Progression free survival among groups I,II and III

EP-034[Neurooncologic Surgery]
INTRAVENTRICULAR BRAIN TUMORS: SURGICAL RESULTS

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INTRODUCTION - OBJECTIVE: 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. The aim of the study was to identify patterns of surgical results in treatment of patients with intraventricular tumors, depending on the lesion location and its degree of differentiation.

METHOD: A retrospective analysis of 54 consecutive surgical interventions on intraventricular brain tumors that were treated at the Uzhhorod Regional Clinical Center of Neurosurgery 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%).

RESULTS: 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 tumours are in direct dependence from the tumor localisation 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.

EP-037[Neurooncologic Surgery]
SURGERY OF PINEAL REGION TUMORS USING SUBOCCIPITAL SUPRACEREBELLAR APPROACH

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Khechinashvili Medical University Hospital

INTRODUCTION - OBJECTIVE: The surgical removal of pineal region tumors ranks among the most difficult neurosurgical intervention and neurosurgeons must have high skills for this type of surgery. The aim of present study was the assessment of advantages of suboccipital supracerebellar approach to pineal region tumors.

METHOD: We present data of 5 patients with pineal region tumors, which underwent open surgery by suboccipital supracerebellar approach.

RESULTS: All patients (Mean age 10,2 years old,3 male/2 female) underwent neurosurgical intervention used suboccipital supracerebellar approach and gross total removal was achieved. MRI with contrast enhancement had been done in all patients before and after surgery, which demonstrated tumor radical removal. Pathological investigation were revealed -2 pineocytoma, 2 pineOblastoma, 1 meningioma. Before and after surgery neurological assessment revealed the following: visual and ocular movement were impaired in 3 patients, imbalance and ataxia were found in 2, but all of them were temporary. All symptoms resolved in 3 months, long-term outcome was good in all patients 3 of them completely recovered, in 2 patients revealed only neurological signs, which were not interfere in everyday life. 2 patients with pineOblastoma underwent radiation therapy. In all cases marked hydrocephalus presented before operation. In two cases third ventricle was connected with cisterna magna by shunt.In 3 patients shunt weren't needed, because of restored of cerebrospinal fluid flow.

CONCLUSIONS: Our results suggested that suboccipital supracerebellar approach in cases of pineal region tumors is useful, valuable and suffici t to shape the surgical access to achieve total tumor removal.

EP-038[Neurooncologic Surgery]
SURGERY OF FORAMEN MAGNUM MENINGIOMAS USING CONVENTIONAL POSTERIOR SUBOCCIPITAL APPROACH

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INTRODUCTION - OBJECTIVE: We have analysed perioperative and short-term outcome in 7 patients with foramen magnum meningioma operated via posterior suboccipital approach.

METHOD: From 2007-2013, 7 patients with foramen magnum meningiomas were operated by use of conventional suboccipital approach with a midline incision, C1 laminectomy and suboccipital craniectomy with lateral extension toward the side of the tumor up to occipital condyle.

RESULTS: The age of patients varied from 35 to 69 years old. The tumor size was ranged from 2,4 to 4,2 sm. A partial condyle resection was performed in two cases to improve the exposure. Total tumor resection was performed in 6 patients and subtotal resection in 2 case, because of the enhancement to brainstem and VA-PICA junction. After surgery two patients developed low cranial nerves weakness. In one patient transient hemiparesis was developed. There was not any signifi ant postoperative complication in other patients. The average length of follow up was 18 months. During follow-up there has been no recurrence of the tumor or growth of the residual tumor.

CONCLUSIONS: According to our experience we thought that a large majority foramen magnum meningiomas can be excised with latheral suboccipital approach and meticulous microsurgical techniques

EP-039[Neurooncologic Surgery]
RELEVANCE OF ICP MONITORING DURING TRANSSPHENOIDAL PITUITARY SURGERY

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INTRODUCTION - OBJECTIVE: We introduced minimally invasive and effective techniques for identify hidden intraoperative liquorrhea.

METHOD: Forty two patients were included in the study (average age 48,7±2,93). Patient's ICP has been examined by a lumbar drainage (LD). It was examined at the beginning and the end of operation.

RESULTS: Patients were divided into 3 groups: 1) Patients with LD which wasn't opened during the operation or was opened to remove CSF less then 30 ml CSF(15 patients); 2) The second group has had LD which was opened to remove CSF all the time more than 30 ml (17 patients); there were not dura mater injure and itraoperative CSF leak in the first and second groups; 3) patients with LD who has had itraoperative CSF leak and/or dura mater injury (8 patients). ICP was constant in the first group or was noted decrease of ICP (from 11,53±0,83mmHg to 8,33±1,11mmHg). It decreased to negative value (from 13,7±0,99mmHg to -8,76±1,45mmHg) in the second group. ICP decreased to zero so long as there was CSF leak (from 13,62±1,36mmHg to 0,38±0,26mmHg) and became positive or negative after dura mater repair (average value -4,62±2,29 mmHg).

CONCLUSIONS: intraoperative CSF leak could be hidden or plastic defect could not be effective after TMO injury during endoscopic transsphenoidal surgery. Intraoperative ICP monitoring via lumbar drainage is effective for detecting hidden intraoperative liquorrhea.