POSTOPERATIVE HYPERTENSION IN CRANIOTOMIES IN TUMORS

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INTRODUCTION: Systemic hypertension (HTN) is a risk factor for postcraniotomy intracranial hematomas.¹ Studies have quoted 20 to 80 % incidence of HTN following craniotomies for tumour². However these studies have not had incidence of HTN as the primary endpoint. The purpose of this study is to determine the true incidence of postoperative HTN, and identify predictive factors.

METHODS: After IRB approval, all consented patients undergoing craniotomy for tumor were prospectively followed. Data collected included patient demographics, surgical data, hemodynamic parameters, complications and outcome. Hypertension was defined as a value of greater than 160/90 mmHg lasting longer than 5 minutes. Statistical analyses were by Chi-Square test and t-tests.

RESULTS: 108 patients were followed. 37(34.2%) patients were hypertensive in the postoperative period. 10 patients with treatable causes of HTN (pain, hypothermia, vomiting) were excluded. True incidence of hypertension was 25%. There were no demographic differences between the groups. Results are shown in the table

	HTN (n=37)	No HTN (n=71)
Chronic HTN (n)	19*	18
Raised ICP (n)	18*	11
Site of tumor (n)		
Supratentorial	28	41
Infratentorial	10	30
Type of tumor		
Primary CNS	10	26
Meningioma	9	21
Metastases	8	24

* p <0.05

CONCLUSION: In our study true incidence of post craniotomy HTN is 25%. Chronic HTN and raised intracranial pressure are significant predictive factors. These results are preliminary and more numbers are needed to identify risk factors.

REFERENCE:1.Basali A, Mascha EJ, Kalfas I, et al. Anesthesiology.2000;93: 48-54.

2.Schubert A. Anesth Analg 2002; 94:485-487.