

## **HEADACHE - INTRAVENTRICULAR TUMORS - NEUROENDOSCOPY**

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**Introduction:** Neuroendoscopy is becoming the method of choice for different intraventricular pathology. It reduces the brain retraction, avoids the dissection of the corpus callosum and allows a panoramic view of the ventricular cavity. However, purely neuroendoscopic removal of intraventricular lesions is difficult due to small diameter of the working canal. We present our experience of neuroendoscopic treatment of intraventricular cystic and also solid lesions.

**Patients and methods:** All patients were treated due to intraventricular lesions. The most common pathology was the colloid cyst and removal of pineal, porencephalic and gliependymal cyst were presented. Large solid tumor of the third ventricle was also successfully treated. We used rigid endoscope with four channels. Burr hole trepanation was made and anterior horn of the lateral ventricle was reached with endoscope in all cases. Third ventriculostomy was performed at the same time.

**Results:** There were no intraoperative complications and major neurological deficits after the procedures. The postoperative courses were mostly uneventful except in one case where transient diabetes insipidus appeared, in another one a minor intraventricular hemorrhage was detected on the control CT scan. Postoperative confusion was noticed in some patients but resolved spontaneously.

**Conclusion:** Specific intraventricular pathology can be permanently treated with pure neuroendoscopic approach. To achieve the best surgical result, proper selection of patients is crucial. There are some limitation and disadvantages of neuroendoscopy that have to be on surgeon's mind. Nevertheless pure neuroendoscopic removal of intraventricular lesions has emerged as a viable option with minimal complication and good outcome.