

## Neuroendoscopic management of cystic craniopharyngioma

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**Introduction:** Craniopharyngiomas are benign non-glial suprasellar-sellar tumors responsible for approximately 10% of all pediatric intracranial tumors. In spite of being benign tumors, the anatomical location, extent, tendency to invade surrounding structures, associated endocrinopathies and the difficulty in management associated with the tumor along with the subsequent morbidity and mortality make treating this tumor a challenge. The optimal management of craniopharyngiomas also remains controversial. Gross total resection (GTR) is considered the gold standard but associated with high complication rate.

**Objectives:** To study the long-term outcome of Neuro-endoscopic management of cystic craniopharyngiomas.

**Material and methods:** This was a single center retrospective study. Retrospective data was collected from departmental record section and hospital follow up visit records from January 1, 2010 to December 31, 2017 from Department of Neurosurgery, KGMU, Lucknow. Their epidemiological and clinico-radiological parameters were tabulated and the outcome was analyzed on the basis of treatment modality, morbidity & mortality.

**Results and conclusions:** Craniopharyngiomas most commonly occurred in the first decade. The male to female ratio was 2:1. The most common clinical presentation was headache (95%) followed by impairment of vision (73.8%). On neuroimaging, most of the tumors were solid-cystic (76.6%) and 70.8% of tumors were of 3-6 cm in size. Tumor calcification was seen in 70.8% of cases and hydrocephalus was seen in 83.3% of cases. Hypothyroidism (58.3%) was the most common endocrinal impairment. Mean follow up of the patient is 43.35 months. In the current study it is observed that Five-year survival rate was 82.70% with Functional independency was seen in 17 (70.83%) cases and Visual improvement was seen in 12 cases (50%). Most common perioperative complication was transient Diabetes Insipidus. Most common long-term complication was growth failure (41.6%). Hence Neuroendoscopic decompression is an effective alternative for long term disease control and clinical improvement without additional endocrinopathies.

### Biography

Ankur Bajaj done his bachelor's degree of MBBS from King George's Medical University Lucknow from 2002-2009. Then completed residence in general surgery from 2009-2012 and in neurosurgery from 2012-2015 from prestigious Post Graduate institute of medical science (PGIMER) Chandigarh. After completing he is full time devoted to neurosurgery and is now Associate professor in King George's Medical University (KGMU), Lucknow. He has ability to take quick and appropriate decisions in critical surgical circumstances is his strength. With Strong organizational and planning skills, he is also the co- incharge of trauma center neurosurgery department in KGMU. He is skilled in operating endoscopic and microneurosurgical procedure of brain and spine.

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