

## Case Analysis

# Meningiomas of the Lateral Ventricles

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**Objectives:** Meningiomas of the lateral ventricles are rarely encountered tumors in the central nervous system. This is a retrospective study that illustrates different forms of presentation and modalities commonly applied to the treatment of lateral ventricular meningiomas.

**Methods:** Nineteen patients with meningiomas of the lateral ventricles underwent surgery at Chang Gung Memorial Hospital in Linkou between January 1976 and December 1996. The tumor was located in the trigone in 17 cases, and in the frontal horn in 2. All diagnoses were confirmed with operative findings and by histological examination. A retrospective analysis of the medical charts for clinical manifestations, radiological features, surgical interventions and surgical outcome was carried out.

**Results:** This study involved 15 female (79%) and four male patients (21%), ranging in age from 14 to 84 years (mean age 41.4 years) at the time of surgery. Preoperative symptoms included headache in 14 cases (74%), weakness in 9 cases (47%), visual disturbance in 8 cases (42%), nausea/vomiting in 5 cases (26%), seizures in 3 cases (16%), speech disturbance in 3 cases (16%), and mental disturbance in 2 cases (11%). Seventeen tumors (89%) were located in the trigone, and two tumors (11%) in the frontal horn. Twelve tumors (63%) were located in the left and 7 tumors (37%) in the right. Twelve tumors (63%) were treated by the posterior middle temporal approach; 4 tumors (21%) by the superior parieto-occipital approach; 2 tumors (11%) by the anterior transcallosal approach; and one tumor (5%) by the posterior transcallosal approach. Complications included venous infarct in 2 cases (11%); disseminated intravascular coagulation in one case (5%); wound infection in one case (5%), and residual tumor in one case (5%). On follow-up evaluation, 15 patients (79%) had a good outcome; 2 patients (11%) had a fair outcome, and two patients (11%) died.

**Conclusions:** The primary treatment for lateral ventricular meningioma is surgery, with the aim of total resection. Microsurgical removal of tumor probably contributed to the success in the treatment of the lateral ventricular meningiomas.

**Key words:** meningioma, lateral ventricle, surgical approach

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