

## Original Article

# Olfactory Groove Meningiomas: Surgical Experience from 35 Cases

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### Abstract.

**Background:** Olfactory groove meningiomas (OGMs) account for about 10% of all intracranial meningiomas. We report on the clinical outcomes and recurrence rate of OGMs after surgical treatment in our neurosurgery department.

**Methods:** The authors searched the database at the Department of Neurosurgery, Chang Gung Memorial Hospital, Chang Gung University, Linkou for cases of OGM treated between May 1992 and September 2005. A retrospective study was conducted by analyzing the charts of the patients. The mean follow-up period was 63 mo (range, 12–178 mo).

**Results:** Thirty-five patients underwent 39 OGM surgeries. Tumor diameter ranged from 2 to 7 cm (average, 4.8 cm). In 21 surgeries (53.8%), the tumor was removed by bifrontal craniotomy via a subfrontal approach; 6 surgeries (15.4%) involved bi-fronto-orbital craniotomy; 5 (12.8%) were accomplished by bifrontal craniotomy via an interhemispheric approach; 6 (15.4%) were performed via a unilateral subfrontal approach; and 1 (2.6%) was performed via a pterional approach. In the primary operations, total and subtotal removal were achieved in 29 (82.9%) and 6 patients (17.1%), respectively. Nine patients (25.7%) experienced surgery-related complications, the majority being 4 cases of cerebrospinal fluid leakage. There was no operative mortality and no new cases of permanent focal neurological deficit. No recurrences were reported in 31 patients (88.6%).

**Conclusions:** Although OGMs are located at the base of the skull, a well-trained neurosurgeon can use modern microsurgical techniques with an appropriate surgical approach and obtain an excellent clinical result.

**Keywords :** olfactory groove, meningioma, surgical treatment

## 原著論文

### 35 例嗅溝腦膜瘤之手術治療經驗

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