

中文摘要

背景：嗅溝腦膜瘤約佔所有顱內腦膜瘤之百分之十，我們在此報告本神經外科部門手術治療嗅溝腦膜瘤之臨床結果及復發率。

研究對象及方法：本文作者針對曾於 1992 年五月至 2005 年九月間，於林口長庚紀念醫院神經外科系手術治療過的嗅溝腦膜瘤個案進行調查。此一回溯研究方法為收集病歷資料再分析之，平均追蹤時間為 63 個月（12 至 178 個月）。

研究結果：總共 35 個病患經歷了 39 個嗅溝腦膜瘤手術。腫瘤大小從 2 至 7 公分，平均 4.8 公分。其中 21 個(53.8%)手術，使用雙側額部開顱術合併額葉下接近法，6 個(15.4%)使用雙側額部併眼眶開顱接近法，5 個(12.8%)使用雙側額部開顱術合併大腦半球間接近法，6 個(15.4%)使用單側額葉下接近法，1 個(2.6%)使用 pterional 接近法。在第一次手術的病例中，29 個(82.9%)達到腫瘤完全切除，另外 6 個(17.1%)達到腫瘤次全切除。共有 9 例發生術後合併症，以 4 例腦脊髓液外漏最多。並無手術相關死亡病例，亦無造成新的神經缺損。31 個(88.6%)病患無復發之發生。

探討：雖然嗅溝腦膜瘤手術屬於顱底手術，但只要訓練良好之神經外科醫師加上先進的顯微手術技術，並選擇適當的手術接近法，就可得到極佳的手術治療結果。

關鍵字：嗅溝、腦膜瘤、手術治療

INTRODUCTION

Meningiomas are usually benign, slow-growing tumors, originating from the arachnoidal cap cells. They account for approximately 20% of all primary intracranial tumors [1-3]. Olfactory groove meningiomas (OGMs) account for about 10% of all intracranial meningiomas [4]. Most OGMs occupy the floor of the anterior cranial fossa, extending all the way from the crista galli to the tuberculum sellae [5]. As they grow, OGMs push the optic nerves and the optic chiasm downward and posteriorly. By the time of diagnosis, OGMs are often very large and/or infiltrating or involving surrounding vascular or nervous structures, making tumor removal challenging.

A number of varied surgical approaches have been applied for tumor removal. Traditionally, frontal or bifrontal craniotomy combined with a subfrontal approach is used most often. More recently, however,

some surgeons have used a pterional or interhemispheric approach. More extended approaches, including transbasal, subcranial, and fronto-orbital approaches, frontal or bifrontal craniotomy combined with orbital or nasal osteotomies, and craniofacial resection have been utilized for resection of OGMs expanding into the paranasal sinuses, nasal cavity, or orbits.

In this article, we present the clinical results from the surgical treatment of 35 patients with OGMs via bifrontal, unilateral subfrontal, pterional, interhemispheric, and bi-fronto-orbital approaches.

MATERIALS AND METHODS

Patient Population

From May 1992 through September 2005, our neurosurgical team operated on 35 patients with OGM tumors from among 1693 patients with intracranial meningiomas at the Department of Neurosurgery, Chang Gung Memorial Hospital, Chang Gung University, Taipei, Taiwan.

There was a significant female predominance (22 patients; 62.9%). Patient ages ranged from 32 to 68 y (average, 50.9 y) (Table 1). All patients underwent preoperative and postoperative neuroimaging studies,

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