Planum sphenoidale meningioma treatment

Midline anterior skull base lesions are becoming amenable for total surgical excision with minimal morbidities and mortalities. Most preferred surgical routes are the subfrontal approach and the pterional approach \(^1\).

Small and midsize olfactory groove, planum sphenoidale, and tuberculum sellae meningiomas can be removed via an endonasal endoscopic approach, an alternative option to the transcranial microsurgical approach. The choice of approach depends on tumor size and location, involvement of important neurovascular structures, and, most importantly, the surgeon’s preference and experience. In most meningiomas, the endonasal approach has no advantage compared with the transcranial approach. Disadvantages of the endonasal approach are the discomfort after surgery and the prolonged recovery phase because of the nasal morbidity, which requires intensive nasal care. Compared with the eyebrow approach, the trauma to the nasal cavity, paranasal sinuses, and skull base is greater, and the risk of cerebrospinal fluid leak is higher \(^2\).

A combination of different surgical and endovascular techniques before resection of hypervascular giant planum sphenoidale meningiomas should always be considered. Microsurgical extracranial ligation of anterior and sometimes posterior ethmoidal arteries provides a safe and feasible option to limit blood loss during anterior skull base surgery \(^3\).

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