

**TUBERCULUM SELLAE MENINGEOMAS: SURGICAL ANATOMY AND THE IMPORTANCE OF OPTIC CANAL DEROOFING. INITIAL SERIES OF TEN CASES**

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Objective: To present a initial series of surgically treated tuberculum sellae meningiomas with particular regard to involvement of the optic canal, surgical anatomy and optic canal deroofing. Methods: A prospective analysis of 12 patients with meningiomas originating from the tuberculum sellae: 10 underwent surgery between 2007 and 2009. The standard surgical approach consisted of right cranio-orbital approach in 9 patients and extended transsphenoidal endoscopic approach in one patient with a small tumor. All patients were studied with MRI and CT. Four tumors involved the optic canal, two bilaterally. This finding, however, was not present in preoperative MRI in three patients. Results: Total macroscopic resection was achieved in nine patients and subtotal in one patient. Median tumour size was 2.6 cm. Postoperatively, visual acuity improved in 5 patients, 3 unchanging and deteriorated in one. Preoperative and postoperative visual acuity worsened with increasing duration of preoperative symptoms and with increasing age. Tumour size did not influence visual acuity. One patient died from causes unrelated to the tumour (sepsis). Conclusions: In the majority of patients with tuberculum sellae meningiomas, total resection may be achieved through a cranio-orbital approach with minimal complications. We suggest investigation with MRI with oblique slices to study all extension of the optic canal.