World Neurosurg. 2017 Jun;102:139-143. doi: 10.1016/j.wneu.2017.03.009. Epub 2017 Mar 12.

Clinical Outcome, Tumor Recurrence, and Causes of Death: A Long-Term Follow-Up of Surgically Treated Meningiomas.

de Almeida AN[1], Pereira BJA[2], Pires Aguiar PH[2], Paiva WS[2], Cabrera HN[3], da Silva CC[2], Teixeira MJ[2], Marie SKN[2].

Author information

Abstract

OBJECTIVE: The medical literature still lacks information about the impact of surgery and adjuvant treatment on the life of patients with meningioma. The clinical outcome, timing of tumor recurrence, and causes of death are often overlooked. This study evaluates these data taking into account tumor localization and histologic grade.

METHODS: The article is a cross-sectional study of patients operated on between 2000 and 2014 in a single institution. The series has 593 adult patients (442 females and 151 males) and follow-up of 68.8 ± 48.9 months. Imaging of 434 patients was reviewed and 379 patients/families interviewed.

RESULTS: Sixty-eight deaths were related to tumor treatment/progression and 36 to other causes. After 2 years of surgery, deaths not related to tumor were 7 times more frequent than were tumor-related deaths (odds ratio, 7.1; 95% confidence interval, 2.8-19.5; P < 0.0001). Ten-year survival was expected in 85% of patients with grade I (GI) meningioma, 35% of patients with atypic (GII) meningioma, and 0% of patients with anaplastic (GIII) meningioma. Convexity tumors had about half the risk of recurrence compared with other localizations (odds ratio, 0.4; 95% confidence interval, 0.27-0.67; P = 0.0002). In GI meningioma, recurrence was neither related to death nor to impairment of independent life. All patients with GII and GIII meningioma who had recurrence died. 96.3% of interviewees reported neurologic improvement or stability after the surgery.

CONCLUSIONS: Histologic grade is the most important factor for long-term survival. Complete resection has to be pursued in GII and GIII meningioma but must be carefully weighed against morbidities in GI meningioma.

KEYWORDS: Meningioma; Prognostic; Progression-free survival

PMID: 28300708 DOI: 10.1016/j.wneu.2017.03.009

[Indexed for MEDLINE]

MeSH terms

LinkOut - more resources