

Craniofacial resection for malignant tumors of the paranasal sinuses

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Abstract

Objective: To review the experience with craniofacial resection for malignant tumors of the anterior skull base and analyze prognostic factors for survival.

Material and Methods: Between 1996 and 2008, 64 consecutive patients with malignant tumors of the anterior skull base underwent craniofacial resection. Different parameters were analyzed to study their relationship with survival: age, sex, pathology, orbital involvement, dural involvement, status of the surgical margins, adjuvant radiotherapy, and whether the treatment was done before or after surgery. Survival analysis was carried out with the Kaplan-Meier product limit method and comparison between groups was performed by the log-rank test. Factors identified in the univariate analysis were then entered in the multivariate analysis using the Cox regression model in order to identify predictive factors of survival.

Results: For the entire group survival rates were 47% at 5 years. The highest survival was observed in patients with estesioneuoblastoma and the lowest in melanoma cases. Dural involvement and orbital clearance are predictors of poor survival.

Conclusion: The improved survival and minimal morbidity associated with craniofacial resection make it the approach of choice for anterior skull base tumors.

Key words: craniofacial resection, tumors, paranasal sinuses, survival, prognostic facors

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