

Meningioma Surgery: Outcome Comparison Between Younger and Elderly Patients

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Objective: In a recently published work we reported our outcome results after surgical treatment of intracranial meningiomas in the elderly (1). In the present report, we were interested to compare those results with younger patients in our collective. □

Methods: We assessed retrospectively morbidity and mortality in 419 patients operated on an intracranial meningioma from 1995 to 2006. Data was gathered from their clinical and surgical charts. All patients were rated according to two proposed grading systems for risk assessment (CRGS and SKALE). Age cutoff was set at 65 years. All single factors were correlated with outcome using Pearson Chi Square and multivariate logistic regression analysis. □

Results: 419 patients were included (248<65y, 171>65y; 105 male, 314 female). Mortality consisted of 1 patient (0,4%) and 12 (7%) in the younger and elderly group, respectively. Postoperative Karnofsky score worsened in 57 patients, 22 (8,9%) in the younger group and 35 (20,5%) from the elderly one (P<0.001). 362 patients were unchanged or improved. Worsening of postoperative Karnofsky index was statistically correlated with increasing age. Sex and Simpson resection grade had no influence on postoperative Karnofsky worsening. Total CRGS and total SKALE scores were significantly related to outcome only in the elderly group (Table 1). Valuating each single factor of the proposed scale (Table 2), critical location and eloquent were significant in the younger group (P=0.003 and P<0.001, respectively). ASA and concomitant disease were significant predictors in the elderly group (P<0.001 and P=0.004, respectively). Critical location (SKALE) was significant in the elderly group (P=0.047) but eloquent location (CRGS) was not (P=0.2).□

Conclusions: Our results demonstrate that meningioma surgery is correlated with higher mortality as well as significantly higher rate of postoperative morbidity in elderly patients. Our mortality results are similar to those published elsewhere. The decision for surgery in the elderly should consider the general health state of a patient, including both his neurological and medical conditions. In younger patients the only factor predicting an adverse outcome is an eloquent tumor location. Elderly patients with bad general condition should be excluded from operative intervention.

(1) Meningioma surgery in the elderly: Outcome and validation of two proposed grading scores systems. **Schul** DB, Wolf S, Krammer MJ, Landscheidt JF, Tomasino A, **Lumenta** CB. Neurosurgery. 2012 March;70(3):555-65