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Comparison of Stereotactic Craniotomy for Brain Metastasis, as Compared to Stereotactic Radiosurgery

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Abstract : Our experience with 50 patients with metastatic tumors located in different locations of the brain by a stereotactic-guided craniotomy and total microsurgical resection. Patients ranged in age from 36 to 73 years. There were 28 women and 22 men. Thirty-four patients presented with hemiparesis and 6 with aphasia and the remaining presented with psychological manifestations and memory issues. Gross total resection was accomplished in all cases, with postoperative imaging confirmation of complete removal. Forty patients were subjected to whole brain irradiation. One patient developed a stroke postoperatively and another one had a flap infection. 4 patients developed different postoperative but unrelated morbidities, including pneumonia and DVT. No mortality was encountered. We believe that with the assistance of stereotactic localization, metastases in vital regions of the brain can be removed with very low neurologic morbidity and that, in comparison to other modalities, they fare better regarding their long-term outcome.

Keywords: stereotactic, craniotomy, radiosurgery, patient

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