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**MULTI-SEQUENTIAL STEREOTACTIC RADIOSURGERY (SRS) FOR BRAIN METASTASES: 10-YEAR EXPERIENCE FROM THE CHUV (LAUSANNE, SWITZERLAND) BRAIN METASTASIS CLINIC**

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**INTRODUCTION:** Brain metastases are a frequent and complex challenge in oncology. Since 2014, the CHUV Brain Metastasis Clinic (Lausanne University Hospital, Switzerland) has delivered multidisciplinary, patient-centered care, prioritizing stereotactic radiosurgery (SRS). Multi-sequential SRS - repeated focal treatments for new or recurrent lesions - has emerged as a strategy to delay or avoid WBRT while preserving local control. We hypothesize that multi-sequential SRS achieves durable local control and prolonged survival in selected patients with brain metastases (BM), while maintaining an acceptable safety profile and reducing the need for WBRT. **METHODS:** We analyzed the CHUV's BRAINMETS cohort, a prospectively maintained database of SRS-treated patients since 2014. A total of 223 patients who underwent  $\geq 3$  SRS courses between 2015 and 2023 were included, irrespective of primary tumor histology. Clinical outcomes assessed were overall survival (OS), brain disease-free survival (brain-DFS), local control (LC), WBRT use, and toxicity. Treatment characteristics included number of SRS procedures, fractionation, and lesions per course. **RESULTS:** Patients received a median of 4 SRS courses (range 3–13), treating a median of 3 BM per course. Single-fraction SRS was used in 87.7% of cases. Median OS was 32 months, with 1-, 2-, and 5-year OS rates of 92%, 62%, and 20%. Brain-DFS was limited (median: 4 months; 1-year: 18%). LC remained high: 1-year LC was 97.0%. Only 10 patients (4.48%) required salvage WBRT. Symptomatic radionecrosis occurred in  $<3\%$  of lesions; grade  $\leq 2$  toxicity in 6.5%. **CONCLUSION:** Multi-sequential SRS is a safe, effective, and repeatable strategy for managing BM, achieving high local control and prolonged survival while avoiding WBRT in most cases. As brain-DFS remains low, SRS plays a critical role in controlling new lesions, reinforcing its place as the cornerstone of intracranial disease management. Dedicated BM clinics, integrating precision local therapy with systemic treatments, are essential for optimizing outcomes in neuro-oncology.