Abstracts

P13.12. LINAC RADIOSURGERY IN THE MANAGEMENT OF PARASAGITTAL MENINGIOMAS
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BACKGROUND: At present, there is no general agreement for the best approach to parasagittal meningiomas. Invasion of the superior sagittal sinus is frequent and responsible for relatively high recurrence rates following conventional microsurgery. Radiosurgery has the potential to treat less accessible portions of these tumors and its application in this pathology is increasing both as a primary or a complementary therapeutic tool. OBJECTIVES: To evaluate our results with LINAC radiosurgery for treatment of parasagittal meningiomas

METHODS: The patient cohort consisted of 74 patients treated for parasagittal meningioma by LINAC radiosurgery at the Sheba Medical Center Radiosurgery Unit during a 15-year period. Women accounted for 61% of patients. Thirteen patients (18%) underwent radiosurgery as the primary treatment for their meningioma. RESULTS: The overall control rate was 90.6% at a mean follow up of 49 months. In 17 patients (22.9%) there was no volumetric change. Fifty patients (67.5%) showed tumor shrinkage ranging from 15-80% of the original mass. In 7 patients tumor recurrence was observed at an average time of 42.2 months after radiosurgery. All the patients with previously untreated tumors were controlled. Symptomatic transient peritumoral edema developed in 5 patients (6.7%) at a mean of 6.4 months after radiosurgery. Three patients complained of protracted headaches post treatment.

CONCLUSIONS: LINAC radiosurgery was highly effective for the treatment of parasagittal meningiomas in this series. For small to medium sized meningiomas with clear invasion of the sinusal lumen, radiosurgery is a reasonable option as a first line treatment. Either alone or combined to conventional surgery, radiosurgery may improve control rate for parasagittal meningiomas.