Re-irradiation in elderly patients with glioblastoma: a single institution experience.

Re-Irradiation (Re-RT) is an established treatment option for young patients with recurrent glioblastoma (GBM). Multiple reports show a low risk of side-effects as well as a good efficacy resulting in median survival times ranging from 5 to 18 months. Elderly patients, however, are underrepresented in reports about Re-RT. Even in the elderly, with concomitant radiochemotherapy and adjuvant chemotherapy, progression-free survival times now are approaching 6 months or even longer. We report on 25 consecutive patients with at least 65 years of age treated with Re-RT for recurrent GBM. We analyzed the patient's files for the treatment regimens, side-effects and survival times. Survival times, as well as hazards, were calculated by the Kaplan Meier method as well as Cox-regression method, respectively. The median overall survival was 6.9 months, treatment was well tolerated with only minor side effects. Use of systemic treatments as well as the length of the interval between 1st-line radiotherapy and re-irradiation were associated with a favorable prognosis. The latter remained significant after multivariate analysis. Re-RT of elderly GBM patients should not be withheld based purely on age since the treatment is safe and results in comparable survival times to younger patients. When counseling elderly patients with
recurrent GBM, especially the length of the interval since 1st line radiotherapy should be considered as a prognostic factor and an additional systemic treatment option should be considered.