P17.19. TO TREAT OR NOT TO TREAT: IMPACT OF AGE AND COMORBIDITIES IN GLIOBLASTOMA PATIENTS

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PURPOSE/OBJECTIVE: Age and comorbidities could influence compliance to adjuvant Radiochemotherapy. We evaluate compliance and outcomes in elderly patients (≥65 years old) with Glioblastoma Multiforme (GBM) treated according to three prospective phase II trials using Temozolomide (TMZ) concurrently and sequential to radiotherapy. MATERIALS AND METHODS: Three prospective phase II trials were performed for patients with a histological diagnosis of GBM (≥18 yrs); radiotherapy was delivered on tumor bed +/- residual + margin of 1.5 cm (CTV1: 59.4 Gy) and tumor bed +/- residual + edema until March 2008 or +/- margin of 3 cm (CTV2: 45 Gy) subsequently. The timing of concurrent Temozolomide (TMZ) was different between the studies: TMZ was administrated in the first and the last week of RT until December 2003 and every five days for week successively excluding Saturday and Sunday; in the third study patients received concomitant or sequential Fractionated Stereotactic Conformal RT boost to increase dose (69.4 Gy). Adjuvant TMZ was administered to all patients: six cycles if disease was absent, or until disease progression or unbearable toxicity in the other cases. Overall co-morbidities were assessed using the Charlson Index of Co-morbidity (CCI). Toxicity was evaluated according to RTOG; survival analysis was calculated using Kaplan-Meier method. RESULTS: 72 patients were treated between October 2001 to December 2012. Median age was 69 yrs (range 65-80 yrs); 41 male and 31 female. 41 patients underwent a partial removal and 31 a complete surgery. A CCI ≥ 1 was present in 41% of patients. 66 patients received a total dose of 60 Gy, while six 69.4 Gy. The compliance to the treatment was 98%. Acute toxicity was reversible in all patients. Neutropenia was observed in in 16.6% (G1-2 11,1% and G3-G4 5,5%); thrombocytopenia was reported in 30,6% (G1-2 15,3% and G3-G4 15,3%). Neurologic toxicity was present in 30,6% of the patients without difference between G1-2 and G3-4. With a median follow-up of 72 months (range 6-139 months), median progression-free-survival was 12 months. Median overall survival (OS) was 15 months, 2-ys OS was 30%, no patient being alive at 5 years. A significant impact on OS was present from only complete surgery vs partial (p = 0.03) and a trend for radiation dose of 7000 vs 6000 cGy (p = 0.06). It was not observe any difference in OS after a stratification of elderly (two subsets ≥70 yrs; three subsets <70, between 70 and 74, >75 yrs). In particular, at 2 years OS was: 10% for patients >75 years old, 21% for >70 and <74, 38% for < 70. CONCLUSIONS: This study suggests that radio-chemotherapy is feasible also in elderly with an improved OS for higher doses of RT. CCI ≥ 2 does not impact on compliance and outcomes. A prospective study is ongoing to confirm these findings.

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