P15.16. EVOLUTION OF THE FUNCTIONAL INDEPENDENCE IN Glioblastoma Patients

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INTRODUCTION: Functional independence in glioblastoma (GBM) patients is a key factor to maintain quality of life. Progression free survival (PFS) and overall survival (OS) have been largely described in the literature. However, the evolution over time of the performance status remains poorly known. OBJECTIVE: To study the time to deterioration of the Karnosky Performance Status (KPS) below 70% in an homogeneous population of GBM patients. METHODS: We analyzed all patients treated in our institution between 2008 and 2012. Patients were included if they met the following criteria: age > 18 years, histologically confirmed GBM, supratentorial location, post-surgical KPS ≥ 70%, initial treatment with concomitant radiotherapy (RT) and Temozolomide (no Bevacizumab). Age, tumor location, surgical procedure, steroid dose at RT onset, KPS at 1 month after RT, then every 2 months until death, were collected in all patients. RESULTS: Within the 63 patients studied, median age was 61 years and 75% underwent surgical resection at time of diagnosis. Forty-eight patients received one or several lines of chemotherapy at recurrence, and 34 patients (54%) were treated with Bevacizumab at one point during their evolution. The median PFS was 8.9 months and the median OS was 17.4 months. Interestingly, the median survival with KPS ≥ 70 (OS-70%) was 12 months, thus exceeding the median PFS by more than 3 months. OS-70% exceeded PFS by 6 months in 27% of the patients. Deterioration of KPS < 70% occurred before progression in only 39% of the patients. Only surgical resection and low dose steroids (< 30 mg equivalent prednisone) at RT onset, but not age (60 years), initial KPS, tumor location (frontal vs others), or seizures, were statistically associated with increased OS-70% (14.8 vs 4.5 months, p = 0.017; 16.2 vs 7.2 months, p = 0.001, respectively). DISCUSSION: In our series, the first recurrence after the initial treatment with RT and Temozolomide was not associated with loss of functional independence, which usually occurred later during evolution. Surgical resection and low dose steroids, but not age or KPS, appeared as prognosis factors for OS-70%. The impact of Bevacizumab on OS beyond first progression is currently under study. CONCLUSION: Median survival with KPS ≥ 70 (OS-70%) and PFS are poorly correlated, OS-70% exceeded PFS by 3 months in half of the patients and by 6 months in a quarter of the patients. Surgical resection and low steroid requirements before RT appear associated with increased ON-70%.