P01.120 Importance of systematic TERT promoter and IDH mutations screening in non-diagnostic biopsies from patients with a suspected glioma

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BACKGROUND: GC is defined as a rare pattern of growth of gliomas, involving three or more cerebral lobes. Considering its rarity, it’s still difficult to define prognostic factors and standard of treatment. Retrospectively, we analyzed patients (PT) with GC from two neuro-oncology centers to identify prognostic factors and the best management.

MATERIAL AND METHODS: Medical records of patients ≥ 18 years, with histological diagnosis of GC were analyzed in 16 PT, with a follow-up of 18 years. Differences in OS were statistically evaluated using log rank test. Kaplan-Meier method was used for disease specific survival (DSS).

RESULTS: GC patients had a poor OS with a median survival of 10 months. The most common presenting symptom was rapid neurological deterioration (RTD) with a progressive neurocognitive deficit. A total of 74% of patients had a primary progression and 25% of patients had a second progression. Median survival in surgery was 19 months, in radiotherapy 12 months, and in chemotherapy 6 months. Patients who had surgery and radiotherapy had a better survival than patients who had radiotherapy alone. The best response was a complete response (CR) in 3 PT, a partial response (PR) in 9 PT, and stable disease (SD) in 14 PT. The median survival in CR was 36 months, in PR was 10 months, and in SD was 3 months. The histological diagnosis of the recurrent lesions was confirmed by a second biopsy in 15 PT. A total of 74% of recurrent lesions were glioblastoma (GBM) and 26% of recurrent lesions were oligodendroglioma (OD). The most common treatment for recurrent lesions was surgery in 9 PT, radiotherapy in 6 PT, and chemotherapy in 2 PT. The median survival in surgery was 12 months, in radiotherapy was 5 months, and in chemotherapy was 3 months. The median survival in patients who had surgery and radiotherapy was 18 months and in patients who had radiotherapy alone was 8 months. The median survival in patients who had chemotherapy alone was 4 months. The most common causes of death in GC patients were brain failure in 22 PT, brainstem failure in 4 PT, and progressive disease in 1 PT. The most common side effects of chemotherapy were fatigue in 22 PT, nausea in 20 PT, and vomiting in 19 PT. The most common side effects of radiotherapy were fatigue in 24 PT, nausea in 22 PT, and vomiting in 19 PT. The most common side effects of surgery were headache in 24 PT, nausea in 22 PT, and vomiting in 19 PT.

CONCLUSION: GC is a rare pattern of growth of gliomas, involving three or more cerebral lobes. Considering its rarity, it’s still difficult to define prognostic factors and standard of treatment. Retrospectively, we analyzed patients (PT) with GC from two neuro-oncology centers to identify prognostic factors and the best management. GC patients had a poor OS with a median survival of 10 months. The most common presenting symptom was rapid neurological deterioration (RTD) with a progressive neurocognitive deficit. A total of 74% of patients had a primary progression and 25% of patients had a second progression. Median survival in surgery was 19 months, in radiotherapy 12 months, and in chemotherapy 6 months. Patients who had surgery and radiotherapy had a better survival than patients who had radiotherapy alone. The best response was a complete response (CR) in 3 PT, a partial response (PR) in 9 PT, and stable disease (SD) in 14 PT. The median survival in CR was 36 months, in PR was 10 months, and in SD was 3 months. The histological diagnosis of the recurrent lesions was confirmed by a second biopsy in 15 PT. A total of 74% of recurrent lesions were glioblastoma (GBM) and 26% of recurrent lesions were oligodendroglioma (OD). The most common treatment for recurrent lesions was surgery in 9 PT, radiotherapy in 6 PT, and chemotherapy in 2 PT. The median survival in surgery was 12 months, in radiotherapy was 5 months, and in chemotherapy was 3 months. The median survival in patients who had surgery and radiotherapy was 18 months and in patients who had radiotherapy alone was 8 months. The median survival in patients who had chemotherapy alone was 4 months. The most common causes of death in GC patients were brain failure in 22 PT, brainstem failure in 4 PT, and progressive disease in 1 PT. The most common side effects of chemotherapy were fatigue in 22 PT, nausea in 20 PT, and vomiting in 19 PT. The most common side effects of radiotherapy were fatigue in 24 PT, nausea in 22 PT, and vomiting in 19 PT. The most common side effects of surgery were headache in 24 PT, nausea in 22 PT, and vomiting in 19 PT.