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P089 - The role of CD15 and Cancer Stem Cells in the prognosis of GBM: a pilot study

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Resumen

Introduction: The role of the cancer stem cells (CSCs) in glioblastoma (GBM) has not been clearly defined yet. Many studies have contradictory results about the influence of the presence of these cells in the progression free survival (PFS) and overall survival (OS) rates. However, the majority of these works have been performed using the identification of CD133 with immunohistochemical techniques instead of other kind of molecules which are also present in CSCs.

Objectives: To perform a survival analysis in GBM patients who have been classified in those who present positivity to CD15 (another CSC marker) and those who do not.

Material and methods: A prospective analysis of patients with confirmed histological diagnosis of GBM was performed. All of the biopsies were immunohistochemically tested for the presence of CD15, a trisaccharide antigen expressed on glycolipids and many cell-surface glycoproteins. This marker is almost always present in Hodgkin lymphomas and it has also been demonstrated in CSCs.

Results: Thirty-three patients (42.4% women) were studied. They presented a mean age of 62.6 years old (SD = 11.8). Only seven cases (21.2%) showed positivity to CD15. The survival analysis reflected a shorter PFS in CD15-positive patients (3.5 vs 11.4 months; log-rank p = 0.045). No differences were identified in the OS, probably associated with the low number of patients in CD15-positive group.

Conclusions: GBM patients with CD15 positivity seem to have a worse prognosis. Larger series of patients are necessary for a correct identification of the role of CD15 (and consequently CSCs) in the prognosis of GBM.