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CNS tumours

349P Anaplastic astrocytoma (AA) and glioblastoma (GBM): a real-life experience in Padua Neuro-Oncology Center

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Background: Various prospective clinical trials on high-grade gliomas were performed in the last years but patient (PTS) characteristics and outcome may be different in real clinical practice. We performed a retrospective analysis to evaluate the real-life experience in Padua Neuro-Oncology center.

Methods: Retrospectively, we reviewed the medical records of PTS admitted to our observation from June 2010 to June 2015 with a diagnosis of AA or GBM. We analyzed clinical outcome with prognostic factors

Results: We analyzed 592 PTS with a diagnosis of CNS primary tumor. Among these, we enrolled 395 PTS: 33 (8.4%) with a histological diagnosis of AA, 293 (74%) with a histological diagnosis of GBM and 69 (17.4%) with a radiological diagnosis of GBM. At diagnosis, median age was 63.2 (range 24-88), 61.8% were male; 80% of PTS had an ECOG PS 0-2. Among PTS who underwent surgery, 48% had a radical surgery; 279 PTS (70.6%) performed RT in association to chemotherapy. 17% of PTS performed a second surgery at relapse and 45% a second-line treatment. MGMT was analyzed in all PTS who underwent surgery: it was methylated in 38.7% of PTS, IDH1 was mutated in 6%. GBM PTS with ECOG PS 0-2 and >2 had a median OS of 21.1 and 7.2 ms, respectively. GBM PTS with met and unmet MGMT had a mOS of 22.7 and 13.7 ms ($p = 0.005$). AA PTS with met and unmet MGMT had a mOS of 29.5 and 16.6 ms ($p = 0.03$). Considering all high-grade gliomas, PTS with met MGMT + mutIDH1 reported a mOS of 23.1ms, PTS with metMGMT + wtIDH1 had a mOS of 20.9 ms and PTS with unmetMGMT + wtIDH1 showed a mOS of 12.6ms ($p < 0.001$). On multivariate analysis, ECOG PS 0-2 (HR = 0.6), radical surgery (HR = 0.7), methylated MGMT (HR = 0.5) and PTS receiving a second-line chemoterapy (HR = 0.7) were positive prognostic factors in terms of OS

Conclusions: In our real-life experience most PTS underwent surgery, performed a radiation therapy in association to chemotherapy and nearly half of PTS performed a second-line chemotherapy, although a subset of PTS had a poor performance status. However, we reported a good clinical outcome demonstrating the importance of molecular characterization in these PTS. Type of surgery, ECOG PS, MGMT methylation and lines of chemotherapy were independent prognostic factors

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