Anaplastic astrocytoma without 1p/19q co-deletion

Anaplastic astrocytoma without 1p/19q co-deletion is a rare primary central nervous system tumor occurring primarily in middle-aged adults and associated with a median survival of 5-10 years. The major cornerstone of treatment is maximal safe neurosurgical resection, followed by radiotherapy and chemotherapy. Several clinical trials addressed the optimal adjuvant treatment; however, interpretation has been challenged by the recent molecular marker-based reclassification of the tumour. The interim study of the CATNON trial strongly suggests the addition of 12 adjuvant cycles of temozolomide in addition to radiotherapy after maximal safe resection in patients with anaplastic astrocytoma without 1p/19q co-deletion. Based on more recently presented data from the second interim analysis of the CATNON trial and from the molecular analysis, benefit from temozolomide during and after radiotherapy is limited to patients with isocitrate dehydrogenase-mutated anaplastic astrocytoma. Given the small patient number in the single subgroups and the so far missing neurocognitive and quality of life data, more mature analyses needs to be awaited to draw final conclusions on the application of concurrent temozolomide treatment for the daily routine in patients who already are scheduled for adjuvant temozolomide. Further molecular analysis is ongoing to define personalised treatment approaches in patients with anaplastic astrocytoma [1)].

1)
Berghoff A, van den Bent M. How I treat anaplastic glioma without 1p/19q codeletion. ESMO Open. 2019 Aug 20;4(Suppl 2):e000534. doi: 10.1136/esmoopen-2019-000534. eCollection 2019. Review. PubMed PMID: 31555489; PubMed Central PMCID: PMC6735673.