A case of relapsed medulloblastoma treated with intensity-modulated radiotherapy and temozolomide

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ABSTRACT

We report a case of relapsed high-risk non-metastatic medulloblastoma in a 14-year-old boy, which was treated with intensity-modulated radiotherapy (IMRT) and temozolomide (TMZ). At the age of 11, the patient underwent an MRI-confirmed incomplete resection of a fourth-ventricle medulloblastoma, followed by conventional chemotherapy, craniospinal irradiation (55.8 Gy, 1.8 Gy/fraction) and then myeloablative chemotherapy followed by peripheral blood progenitor cell rescue. After 18 months of complete remission following the completion of chemotherapy, MRI showed a 2.5-cm mass in the olfactory notch. The patient underwent IMRT (45 Gy, 1.8 Gy/fraction) with concomitant administration of TMZ (180 mg/m², 5 days every 21 days), which was well tolerated. After 5 cycles of TMZ, MRI showed complete remission with no evidence of the mass. TMZ was continued for another 5 cycles and then stopped. At 14 months from the completion of IMRT, a new MRI scan showed multiple nodular relapses around the fourth ventricle and the patient is currently treated with oral etoposide. Free full text available at www.tumorionline.it

Key words: high-risk medulloblastoma, relapse, IMRT, temozolomide.