Childhood medulloblastoma.

Massimino M¹, Biassoni V², Gandola L³, Garrè ML⁴, Gatta G⁵, Giangaspero F⁶, Poggi G⁷, Rutkowski S⁸.

Abstract
Medulloblastoma accounts for 15-20% of childhood nervous system tumours. The risk of dying was reduced by 30% in the last twenty years. Patients are divided in risk strata according to post-surgical disease, dissemination, histology and some molecular features such as WNT subgroup and MYC status. Sixty to 70% of patients older than 3 years are assigned to the average-risk group. High-risk patients include those with disseminated and/or residual disease, large cell and/or anaplastic histotypes, MYC genes amplification. Current and currently planned clinical trials will: (1) evaluate the feasibility of reducing both the dose of craniospinal irradiation and the volume of the posterior fossa radiotherapy (RT) for those patients at low biologic risk, commonly identified as those having a medulloblastoma of the WNT subgroup; (2) determine whether intensification of chemotherapy (CT) or irradiation can improve outcome in patients with high-risk disease; (3) find target therapies allowing tailored therapies especially for relapsing patients and those with higher biological risk.

KEYWORDS: Medulloblastoma; Molecular subgroups; Pediatric brain tumours; Prognosis; Rehabilitation in brain tumours; Target therapy

PMID: 27375228 DOI: 10.1016/j.critrevonc.2016.05.012
[Indexed for MEDLINE]