Histopathological prognostic factors in medulloblastoma: High expression of survivin is related to unfavourable outcome


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Abstract

Standard postoperative treatment of medulloblastoma consists of craniospinal irradiation and chemotherapy. Currently, only clinical factors are used for therapy stratification. To optimise treatment and patient outcome, biological prognostic markers are needed. In the present study we tested the prognostic influence of four histopathological parameters considered in recent publications as prognostic factors in medulloblastoma.
We analysed a series of 82 Austrian medulloblastoma patients who were treated according to the consecutive HIT protocols for medulloblastoma conducted by the German Society of Paediatric Haematology and Oncology. Histological subtype and immunohistochemical expression of erbB-2, TRKC, and survivin were determined on paraffin embedded tumour tissue and correlated with patient outcome.

Statistical analysis showed a significant correlation of high expression levels of survivin with decreased survival. None of the other investigated histopathological factors correlated significantly with patient outcome.

Our data indicate that high survivin expression is related to unfavourable clinical outcome in medulloblastoma patients.

**Keywords:** Medulloblastoma; Child; Prognostic markers; Histopathology; Survivin

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