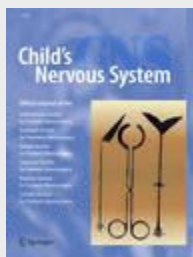


Journal Article



Adverse medical events associated with childhood cerebellar astrocytomas and medulloblastomas: natural history and relation to very long-term neurobehavioral outcome

Journal	Child's Nervous System
Publisher	Springer Berlin / Heidelberg
ISSN	0256-7040 (Print) 1433-0350 (Online)
Category	Original Paper
DOI	10.1007/s00381-008-0658-9
Subject Collection	Medicine
SpringerLink Date	Thursday, June 26, 2008

Online First

 PDF (146.5 KB)  HTML

Caroline Roncadin^{1, 2} , Maureen Dennis^{3, 4}, Mark L. Greenberg^{3, 4} and Brenda J. Spiegler^{3, 4}

(1) Peel Children's Centre, 85A Aventura Court, Mississauga, ON, L5T 2Y6, Canada

(2) McMaster University, Hamilton, ON, Canada

(3) Hospital for Sick Children, Toronto, ON, Canada

(4) University of Toronto, Toronto, ON, Canada

Received: 25 March 2008 **Published online:** 25 June 2008

Abstract

Objectives The objectives of the study are to document the incidence of medical events in survivors of childhood posterior fossa astrocytoma or medulloblastoma in four time periods (diagnosis, perioperative, short-term survival, long-term survival), and to study whether medical events predict neurobehavioral outcome.

Materials and methods Twenty-nine astrocytoma and 29 medulloblastoma survivors were studied at least 5 years post-diagnosis. The incidence of medical events in each time period was compared in each group in relation to long-term intelligence, memory, functional independence, and health-related quality of life. As expected, medical and neurobehavioral outcome were poorer in the medulloblastoma group. In the astrocytoma group, poorer long-term neurobehavioral outcome was associated with more adverse medical events in the perioperative and short-term survival periods.

Conclusions Long-term neurobehavioral outcome is related to time-dependent medical events in astrocytoma survivors. The data confirm earlier reports of poorer outcome after medulloblastoma and add new information about clinical markers of poor neurobehavioral outcome in survivors of childhood astrocytoma.

Keywords Astrocytoma - Medulloblastoma - Childhood - Tumor - Neuropsychological - Late effects

A commentary on this paper is available at doi: [10.1007/s00381-008-0661-1](https://doi.org/10.1007/s00381-008-0661-1).

 **Caroline Roncadin**
Email: croncadin@peelcc.org

References secured to subscribers.

Copyright ©2008, Springer. All Rights Reserved.