ABSTRACT

J Pediatr Hematol Oncol. 2021 Nov 1;43(8):e1223-e1227. doi: 10.1097/MPH.000000000002198.

Myeloablative Carboplatin and Thiotepa With Autologous Stem Cell Rescue for Nonmedulloblastoma High-risk CNS Tumors in Young Children.

Fries C(1), Girvin AR(1), Korones DN(1), Weintraub L(2), Fitzpatrick L(3), Andolina JR(1).

Author information:

(1)Department of Pediatrics, Division of Pediatric Hematology/Oncology, University of Rochester, Rochester.
(2)Department of Pediatrics, Division of Pediatric Hematology/Oncology, Albany Medical Center, Albany.
(3)Department of Pediatrics, Division of Pediatric Hematology/Oncology, University at Buffalo, Buffalo, NY.

Malignant central nervous system (CNS) tumors in young children have a poor prognosis and pose a therapeutic challenge. We describe 11 patients with high-risk CNS tumors (6 atypical teratoid/rhabdoid tumor, 4 nonmedulloblastoma CNS embryonal tumors, and 1 glioblastoma multiforme) who received 32 consolidation cycles of myeloablative carboplatin/thiotepa followed by autologous peripheral blood stem cell rescue. All patients underwent successful stem cell harvest without significant complications. Mean time to absolute neutrophil count $\geq 0.5 \times 103/\mu$ L was 10.2 ± 1.3 days and the mean length of hospital stay was 15.7 ± 3.0 days. There were no regimen-related deaths. Five-year event-free survival and overall survival were $45.5\pm 15.0\%$ and $58.4\pm 16.3\%$, respectively. Tandem carboplatin/thiotepa consolidation with autologous stem cell rescue is well-tolerated in young children with nonmedulloblastoma CNS tumors.

Copyright © 2021 Wolters Kluwer Health, Inc. All rights reserved.

DOI: 10.1097/MPH.000000000002198 PMID: 34001790 [Indexed for MEDLINE]

Conflict of interest statement: The authors declare no conflict of interest.