

Mentkevich et al. (Abstract)

Cellular Therapy and Transplantation (CTT), Vol. 3, No. 9

doi: 10.3205/ctt-2010-No9-abstract28

© The Authors. This abstract is provided under the following license: [Creative Commons Attribution 3.0](#)

[Unported](#)

Abstract accepted for "4th Raisa Gorbacheva Memorial Meeting on Hematopoietic Stem Cell Transplantation", Saint Petersburg, Russia, September 18–20, 2010

[Contribute a comment](#)

previously funded by:



[CTT Archive](#)

[CTT About](#)

[CTT FAQ](#)

[Contact](#)

[CTT Legal Notice](#)

CTT's first partner journal



High dose chemotherapy with PBSC support in pediatric brain tumor patients

George L. Mentkevich¹, Igor S. Dolgoplov¹, Michail S. Laskov¹, Maksim Y. Yankelevich², Sergei K. Gorelushev³, Boris V. Cholodov⁴, Ekaterina M. Tarasova⁴

¹Institute of Pediatric Oncology and Hematology, Russian Cancer Research Center of Russian Academy of Medical Science, Moscow, Russia; ²Children's Hospital of Michigan, Detroit, US; ³Institute of neurosurgery of Russian Academy of Medical Science (named after N/N/ Burdenko), Moscow, Russia; ⁴Moscow Pediatric Neurology Research Center, Russia

Correspondence: George L. Mentkevich, Institute for Pediatric Oncology and Hematology, 24, Kashirskoye sh., 115478, Moscow, Russia, E-mail: gmentkevich@ronc.ru

Abstract

The role and place of HD CT with HSC support in the treatment of pediatric brain tumors remains controversial.

In 2008 we started a protocol: The treatment of patients with brain tumors under the age of 3 years with intensive chemotherapy (NeuroIPO). Currently 35 pts are included in the study with the follow up diagnoses being: ependimoma, 12, medulloblastoma, 13, CPC, 1, ATRT, 6, and sPNET, 4. The median age at diagnosis was 19.7 m. Five pts received tandem transplants with ASC rescue after CBDCA/TMZ/CPM and CBDCA/TMZ/MEL regimens as a consolidation. Three out of five pts are alive and disease free for more than one year. Two-year EFS for the whole group is 42%.

From 2009 we have been piloting a conditioning regimen where craniospinal irradiation is combined with melphalan and topotecan. The first level of RT is 10 Grey, and shows no major unexpected toxicity.

Since 2009 the Moscow neurooncology group has been conducting a trial with intensive chemotherapy with HSC support in pts with medulloblastoma who are more than 4 years of age (modified St. Jude 2003 protocol). After surgery and conformal RT to the residual tumor/or tumor bed pts are treated with 4 courses of CT (Cyclo+CDDP+Vcr), each with HSC support. To date 10 pts are included. Total amount of courses delivered: 30. A median number of $1.45 (0.7-2.7) \times 10^6/\text{kg}$ CD34+ was reinfused after each course of CT. The toxicity of therapy was mainly hematological. No TRM was registered. 5 pts have finished their treatment. None of the pts progressed on CT and have relapsed in this short period of observation to date.

Keywords: brain tumors, high dose chemotherapy, hematopoietic peripheral stem cells

<-- [Previous abstract](#) [Contents](#) [Next abstract](#) -->

[Contribute a comment](#)

[Top](#)