

PubMed

U.S. National Library of Medicine
National Institutes of Health



Display Settings: Abstract

J Neurooncol. 2010 May;97(3):409-18. Epub 2009 Nov 5.

Compartmental intrathecal radioimmunotherapy: results for treatment for metastatic CNS neuroblastoma.

Kramer K, Kushner BH, Modak S, Pandit-Taskar N, Smith-Jones P, Zanzonico P, Humm JL, Xu H, Wolden SL, Souweidane MM, Larson SM, Cheung NK.

Department of Pediatrics, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, Box 429, New York, NY 10065, USA. Kramerk@mskcc.org

Abstract

Innovation in the management of brain metastases is needed. We evaluated the addition of compartmental intrathecal antibody-based radioimmunotherapy (cRIT) in patients with recurrent metastatic central nervous system (CNS) neuroblastoma following surgery, craniospinal irradiation, and chemotherapy. Twenty one patients treated for recurrent neuroblastoma metastatic to the CNS, received a cRIT-containing salvage regimen incorporating intrathecal (131I)-monoclonal antibodies (MoAbs) targeting GD2 or B7H3 following surgery and radiation. Most patients also received outpatient craniospinal irradiation, 3F8/GMCSF immunotherapy, 13-cis-retinoic acid and oral temozolomide for systemic control. Seventeen of 21 cRIT-salvage patients are alive 7-74 months (median 33 months) since CNS relapse, with all 17 remaining free of CNS neuroblastoma. One patient died of infection at 22 months with no evidence of disease at autopsy, and one of lung and bone marrow metastases at 15 months, and one of progressive bone marrow disease at 30 months. The cRIT-salvage regimen was well tolerated, notable for myelosuppression minimized by stem cell support (n = 5), and biochemical hypothyroidism (n = 5). One patient with a 7-year history of metastatic neuroblastoma is in remission from MLL-associated secondary leukemia. This is significantly improved to published results with non-cRIT based where relapsed CNS NB has a median time to death of approximately 6 months. The cRIT-salvage regimen for CNS metastases was well tolerated by young patients, despite their prior history of intensive cytotoxic therapies. It has the potential to increase survival with better than expected quality of life.

PMID: 19890606 [PubMed - indexed for MEDLINE]

Publication Types, MeSH Terms, Substances, Grant Support

LinkOut - more resources