

PubMed

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

KARGER Full Text

FREE full text article
in PubMed Central

Display Settings: Abstract

Case Rep Oncol. 2010 Apr 28;3(2):110-124.

Therapeutic Efficacy of Adoptive Cell Transfer on Survival of Patients with Glioblastoma Multiforme: Case Reports.

Katakura R, Suzuki Y, Sekine T, Sasaki YF, Fujimiya Y.

Department of Neurosurgery, Miyagi Cancer Center Hospital, Natori, Japan.

Abstract

Glioblastoma multiforme (GBM), which occurs mostly in individuals over the age of 40, accounts for 12-15% of all primary brain tumors. Patients with GBM have a poor prognosis, even after aggressive upfront therapies. The present study documents that in 5 of these patients, the use of a novel immunotherapeutic approach combined with standard initial therapies resulted in a prolonged survival of over 3 years, which is significantly longer than the expected survival time with conventional therapies. During the course of intravenous cell-transfer immunotherapy, axial magnetic resonance images of the tumor region were monitored for over 5 years. The discontinuation of adoptive transfer regimens resulted in the rapid deterioration of patients with development of Gd-enhancing regions, indicating the initiation of tumor recurrence. Among patients with recurrence, the reinstatement of adoptive cell regimens with more frequent cell-transfers resulted in an apparent re-regression of tumors. Significantly longer survival times were seen in patients receiving transferred autologous lymphoid cells which were expanded in vitro, and which had a considerable proportion of gammadeltaT cells. We conclude that immunotherapy, combined with standard treatment, plays a significant role in the management of GBM patients and provides patients with a better prognosis.

PMID: 20740183 [PubMed] PMCID: PMC2919986 [Free PMC Article](#)

[LinkOut - more resources](#)