

Journal Article



Topotecan as salvage therapy for relapsed or refractory primary central nervous system lymphoma

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Abstract Treatment for patients with refractory or relapsed primary CNS lymphoma (PCNSL) remains unsatisfactory. Topotecan is an intravenous topoisomerase I inhibitor with good CSF penetration and documented efficacy in patients with relapsed systemic non-Hodgkin's lymphoma. In this study 15 patients with refractory or relapsed PCNSL were treated with intravenous topotecan (1.5 mg/m²) for five consecutive days during each 21-day cycle. All 15 patients had measurable, contrast-enhancing tumor on cranial MRI at the time of relapse. Three (20%) patients achieved a complete response after one, three and four cycles, respectively, while three (20%) patients achieved a partial response after two cycles each, for a total response proportion of 40%. Three patients had stable disease at the end of topotecan treatment. Six patients (40%) had progressive disease during treatment. Median overall survival was 981 days (95% CI: 275, NA) and median progression free survival was 60 days (95% CI: 46, 945). Three out of 15 patients had grade 3 thrombocytopenia. Six out of 15 patients had grade 3 neutropenia, while 5/15 patients had grade 4 neutropenia, and 13/15 patients received g-CSF at some point during treatment. There were no deaths directly related to treatment toxicity. Our study shows that topotecan, as a salvage therapy in patients with relapsed or refractory PCNSL, is associated with an overall response proportion of 40% and should be considered in patients who have failed prior methotrexate-based chemotherapy and/or whole brain irradiation. However, progression is frequent and early and most patients required growth factor support due to myelotoxicity.

Keywords Primary CNS lymphoma - Salvage therapy - Topotecan - Radiographic response - Survival

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References secured to subscribers.

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