

Treatment response of CNS high-grade neuroepithelial tumors with MN1 alteration

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Abstract

CNS high-grade neuroepithelial tumor with MN1 alteration (CNS HGNET-MN1) is a rare entity recently described. Thirteen CNS HGNET-MN1 patients were identified using genome wide methylation arrays/RT-PCR across 7 institutions and were correlated with treatment and outcome. All patients had surgery (GTR:9/STR:4) as initial management followed by radiotherapy (focal:5/craniospinal:2/CyberKnife:1) and systemic chemotherapy in 3 patients. Seven patients relapsed; 5 local and 2 metastatic despite complete resection and radiotherapy. Three patients died due to their tumor relapse after 24 months despite upfront radiotherapy. Treatment of CNS HGNET-MN1 remains a major challenge with multiple failures, despite aggressive surgical resections and upfront radiotherapy.

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