Midline Glioblastoma Multiforme With Bilateral Symmetric Cysts

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Abstract

Cystic glioblastoma multiforme (GBM) is a rare disease. Its exact prevalence has not yet been reported. Also, the mechanism of cyst formation remains to be elucidated. We report a case of GBM with a large peripheral cyst. A 43-year-old woman visited our clinic with a 3-month history of severe headache, memory impairment and general weakness. T1-weighted gadolinium-enhanced magnetic resonance (MR) image revealed a midline enhanced solid mass and bilateral symmetric banana-shaped peripheral cysts. A centrally enhanced mass was measured 2×4 cm in size and both mass and cysts as 7×7 cm. Both the frontal lobe and the frontal horn were severely compressed inferiorly and posteriorly. We resected a midline solid tumor and cysts via the bilateral interhemispheric transcortical approach. Histopathologic examination revealed GBM. The patient was subsequently treated with fractionated conventional brain radiation therapy, followed by temozolomide chemotherapy. Eighteen months later, there was no tumor recurrence and no neurological deficits were noted. Our patient showed no tumor recurrence and a long survival at a long follow-up.

Keywords: Glioblastoma multiforme, Cyst, Prognosis