Intraventricular epithelioid glioblastoma

Epithelioid glioblastoma, a high-grade, diffuse astrocytic tumor variant, comprises closely packed epithelioid cells and rhabdoid cells. This rare tumor usually develops in the cerebral cortex and diencephalon; however, in one woman, it was located intraventricularly.

CASE DESCRIPTION: A 47-year-old woman was referred to our hospital because the patient had a right intraventricular mass that had rapidly increased in size. Upon discovery of the tumor three years earlier by the referring hospital, the mass was small, calcified and attached to the periventricular parenchyma; until 1 year before, it grew slowly, as observed in periodic, magnetic resonance imaging scans. Forty days before the referral, the patient had a headache, nausea, marked growth and intratumoral hemorrhage, visible in a computed tomography scan of the head. The tumor was partially removed via a superior parietal lobule corticotomy. Histopathological examination confirmed an IDH-wildtype epithelioid glioblastoma with a BRAF V600E mutation, but it could no longer detect the original slow-growing lesion. Although this slow-growing mass was no longer detectable, we assume that a low-grade glioma transformed into an aggressively malignant epithelioid glioblastoma.

CONCLUSIONS: We present the first case of an intraventricular epithelioid glioblastoma that may have arisen from a low-grade glioma with calcification. Therefore, we recommend including this tumor variant in the differential diagnosis of lateral ventricle tumors [1)].

1)
Nitta N, Moritani S, Fukami T, Yoshimura Y, Hirai H, Nozaki K. Intraventricular epithelioid glioblastoma: A case report. World Neurosurg. 2018 Feb 6. pii: S1878-8750(18)30243-2. doi: 10.1016/j.wneu.2018.01.200. [Epub ahead of print] PubMed PMID: 29425978.