Sellar glioblastoma

Glioblastomas in the sellar region are very rare; in most cases, the tumor originates from the optic nerve/optic chiasm. Only 4 cases of sellar glioblastoma with a non-optic origin have been reported. We present such a case with detailed clinical, imaging and histopathological information. A review of similar published cases is also presented.

A 42-year-old woman presented with endocrinological abnormalities including, amenorrhea and lactation, symptoms of diabetes insipidus and signs of elevated ICP. MRI showed a giant heterogeneously enhancing lesion involving the intrasellar, parasellar and suprasellar regions, with hyper cellularity and signs of infiltration of adjacent structures. Intraoperative examination revealed the tumor to be independent from the optic pathways but it showed infiltration of the hypothalamic region. Histopathological examination demonstrated uniformly packed small cells and negative staining for GFAP, which was consistent with a diagnosis of small cell glioblastoma.

This is the first report of a small cell glioblastoma in the sella turcica region. Glioblastomas in the sellar region with no clear evidence of an optic origin should be viewed as an independent disease entity. The typical characteristics of this tumor raise the specter of its inclusion as a rare subtype of glioblastomas. Further accumulation of experience is needed to better differentiate these cases and to offer optimal treatment [1)].

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Deng S, Liu L, Wang D, Tong D, Zhao G. Small cell glioblastoma of the sella turcica region: a case report and review of the literature. World Neurosurg. 2017 Nov 15. pii: S1878-8750(17)31961-7. doi: 10.1016/j.wneu.2017.11.038. [Epub ahead of print] PubMed PMID: 29155113.