Synchronous appearance of meningioma and glioma

Sotiris Giannopoulos, MD; George Lagos, MD; Sofia Tsouli, MD; Sigliti-Heniretta Pelidou, MD; Athanassios P. Kyritsis, MD.

1Department of Neurology, University Hospital of Ioannina, Ioannina, Greece
2Neurosurgical Institute, University of Ioannina, Ioannina, Greece

Abstract:
We describe herein a 59-year-old woman with a single seizure minimally affected neurologically. The MRI revealed a presumed meningioma in the right parasagittal region and a second ill-defined lesion in the right temporal lobe. Stereotactic biopsy of the second lesion revealed anaplastic astrocytoma. Although glioma and meningioma may rarely coexist in the same patient, the simultaneous appearance of an insidious glioma and an overt meningioma could result in misdiagnosis of the glioma and potential medical-legal issues concerning the setback in treatment and the impact on outcome.

Key words: Synchronous appearance, meningioma, glioma, neoplasms. misdiagnosis

Case Report:
A 59-year-old woman was presented with a single seizure. The neurological examination 2 hours after the event was unremarkable except for a left extensor plantar response. The magnetic resonance imaging (MRI) study revealed a well circumscribed and homogeneously-enhancing with contrast lesion in the right parasagittal region consisted with meningioma (Figures 1A, 1B). A second ill-defined lesion was noted in the right medial-posterior temporal lobe slightly enhancing with contrast medium (Figures 1C, 1D). Because the nature of the second diffuse lesion was not clear, a stereotactic biopsy was performed that revealed infiltrating glioblastoma multiforme. Subsequently, the patient underwent stereotactic radiosurgery to the presumed meningioma and conventional radiotherapy to the infiltrating glioma (total radiation dose 6000 rads in 30 fractions) and temozolomide chemotherapy which continued for 3 four-week cycles (each cycle of 200 mg/m2 daily for 5 days).

Discussion:
Malignant gliomas are the most common (1), and meningiomas are the second most common neoplasms (2) among the primary brain tumors. Thus, although it is rare, they may coexist in the same patient (3,4). In any event, the simultaneous appearance of an insidious glioma and an overt meningioma could result in misdiagnosis of the glioma and potential medical-legal issues concerning the setback in treatment and the impact on outcome.
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References:

Figure legends:
Figure 1. Axial T2 MRI (A) (arrows), and T1 MRI with contrast (B) show a parasagittal lesion consisted with meningioma. (C) Axial T2 (arrowheads), and T1 with contrast images (arrow) (D), demonstrate the infiltrating character of the posterior temporal lobe lesion.