Cerebellar Tumor Extension as a Late Event of Long-standing, Supratentorial Low-grade Gliomas: Case Report.

Case Reports

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Abstract:
OBJECTIVE AND IMPORTANCE: Nonpilocytic low-grade glial tumors in adults occur mostly in the supratentorial compartment. However, a few cases of infratentorial low-grade gliomas (LGG) have been described. The occurrence of LGG in the cerebellum in the setting of a previously existing supratentorial glioma is rare.

CLINICAL PRESENTATION: We present three young patients with a histologically confirmed diagnosis of long-standing supratentorial LGG. All three patients presented years after their initial diagnosis with a second, nonenhancing lesion in the cerebellum, compatible with the radiological appearance of LGG. Two patients subsequently became symptomatic from these lesions and underwent surgical resection of the cerebellar lesions that were found to have similar pathological features to the original supratentorial tumors. This was confirmed by histology (both patients) and genetic markers (one patient).

INTERVENTION: Magnetic resonance imaging did not demonstrate tumor continuity between the supratentorial and infratentorial lesions in any of the patients. The third patient has shown no cerebellar symptoms to date and is only followed with periodic magnetic resonance imaging.

CONCLUSION: The anatomic/pathological basis of these rare cases may include a primary, multicentric tumor formation, or a secondary tumor infiltration of the cerebrocerebellar pathways, leading to the formation of the cerebellar tumor.