Manuscript Title:
Coexistence of meningioma and other intracranial benign tumors in non-neurofibromatosis type 2 patients: a case series and literature review

Date of Revision:
October 29, 2021

Abstract:
Background: The coexistence of meningioma and other intracranial primary benign tumors is rare, especially in non-neurofibromatosis type 2 (NF2), with limited guidance for the management of such patients. Here, we report a series of five patients with concomitant meningioma and other intracranial benign tumors, including subependymoma and pituitary adenoma. Case summary: Five non-NF2 patients with simultaneous occurrence of meningioma and other intracranial benign tumors were retrospectively reviewed. The patients had no history of previous irradiation. The clinical features, pre- and post-operative imaging, surgical procedure and pathological findings were extracted from electronic medical records. There were four female (80%) and one male (20%) patients. The mean age was 42.8 years (range 29-52 years). The coexisting tumors included subependymoma in one case (20%), and pituitary adenoma in four (80%). The most common clinical symptom was headache (3/5, 60%). Four patients (80%) underwent craniotomy and one patient (20%) underwent transsphenoidal surgery followed by transcranial operation. All tumor diagnoses were confirmed by histopathological examination. The mean follow-up was 38.8 months (range 23-96 months), and all five patients were in a stable condition at last follow-up. Conclusion: The simultaneous...