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Metachronous intracranial meningiomas without dural attachment in a child – Rare case report and review of literature

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Abstract

Introduction: Meningiomas in children are rare, constituting less than 5% of all paediatric brain tumours and less than 2% of all meningiomas. Multiple meningiomas (synchronous or metachronous) are even more uncommon, typically occurring due to radiation exposure or in patients with phacomatoses like Neurofibromatosis II. This report presents the case of a child with metachronous meningiomas without dural attachment in unusual locations, along with their management.

Purpose: This report aims to describe a rare paediatric case of metachronous meningiomas without dural attachment, detailing their presentation, treatment, and outcomes.

Case details: A 2-year-old female presented with headaches, irritability, and excessive crying for one year. A CT scan revealed a mass in the fourth ventricle, causing obstruction, which was surgically decompressed. The biopsy confirmed a clear cell meningioma, WHO grade II. A follow-up MRI identified a new lesion in the suprasellar area six months later, for which she underwent right pterional craniotomy and gross total resection, which turned out to be a clear cell meningioma, WHO grade II. The patient recovered well and remained asymptomatic, with no recurrence on MRI at one-year follow-up.

Conclusion: This case highlights the unusual presentation of metachronous clear cell meningiomas without dural attachment in a young child. Surgical excision resulted in a favourable outcome, though long-term follow-up is essential due to the high propensity for recurrence.

Keywords: Metachronous meningioma; Multiple meningiomas; Paediatric meningiomas.