

Rare Case of Suprasellar Meningioma in a Pregnant Woman

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Background

Meningiomas during pregnancy are rare and often diagnosed late.¹ Incidence of meningiomas estimated to be 7 out of 125,000 pregnancies.² The main challenge lies in early diagnosis and deciding the timing of neurosurgery.

Case

A 42-year-old woman presented at 26 weeks gestation with a history of headache and blurred vision. Initially suspected of having pre-eclampsia, further investigations revealed that this was less likely as her blood pressure was normal with no significant proteinuria. We continued to consider other differential diagnoses, in particular intracranial pathology. Neurology was consulted, who recommended brain imaging and Ophthalmology evaluation. The clinical impression after Ophthalmology assessment was left hypertensive uveitis and optic neuropathy. Thereafter, MRI brain revealed a large 4cm suprasellar tumor extending into third and right lateral ventricle. She was referred to neurosurgery and transferred to a general hospital for multidisciplinary care under neurosurgery, endocrinology and obstetrics. Due to significant visual symptoms, she underwent a resection of suprasellar tumor at 27 weeks. She was discharged 12 days after surgery at 29 weeks and 5 days with improvement of visual symptoms. Histopathological assessment of the tumour confirmed WHO Grade 1 Meningioma. A repeat MRI brain postoperatively showed improvement in optic nerve mass effect. A multidisciplinary team discussion between neurosurgery and obstetrics recommended a planned caesarean section at 37 weeks. The caesarean section was uneventful and the patient had an uncomplicated recovery.

Imaging

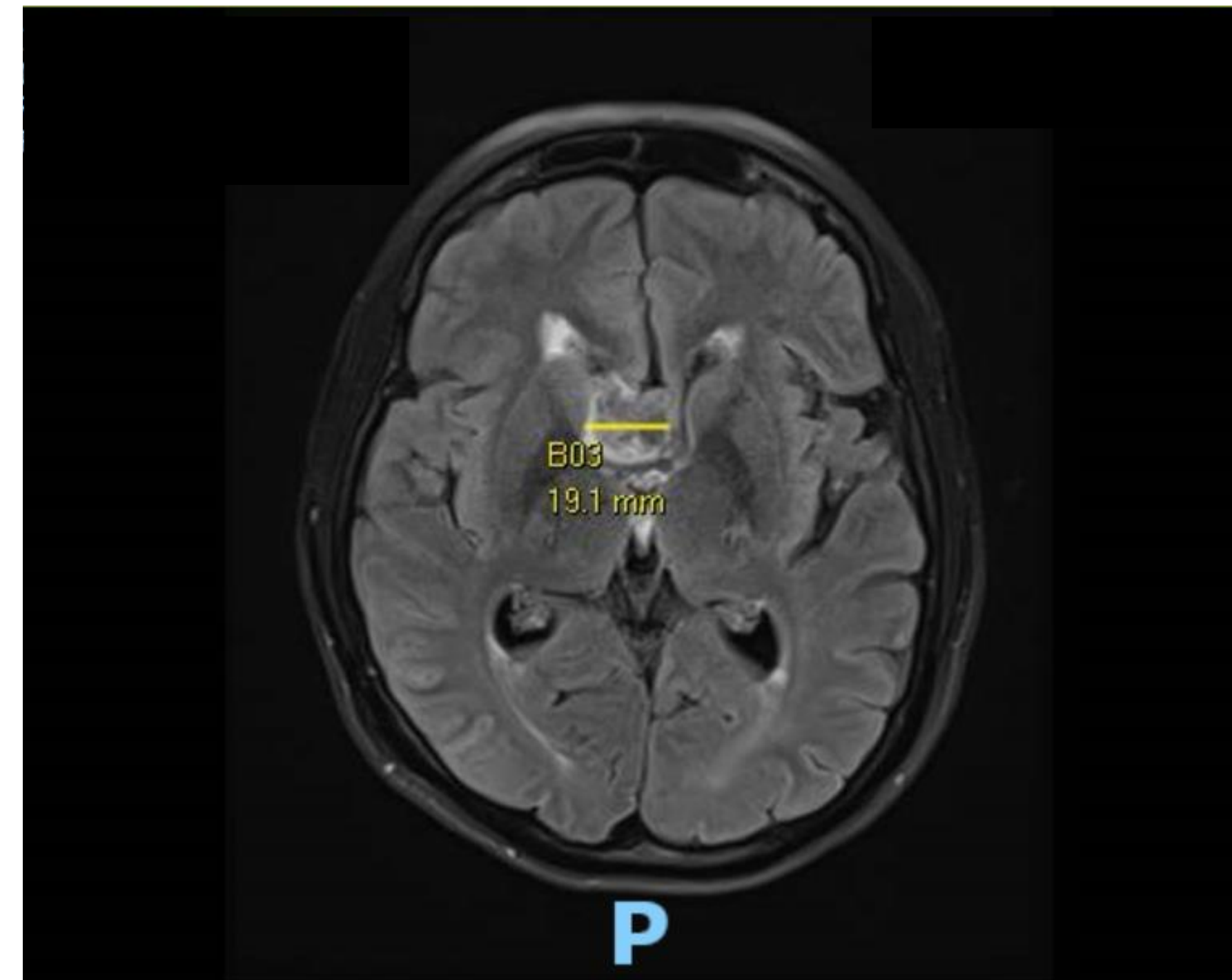


Figure 1. MRI scan showed a lobulated sellar/suprasellar mass 4.1 x 2.1 x 1.9cm

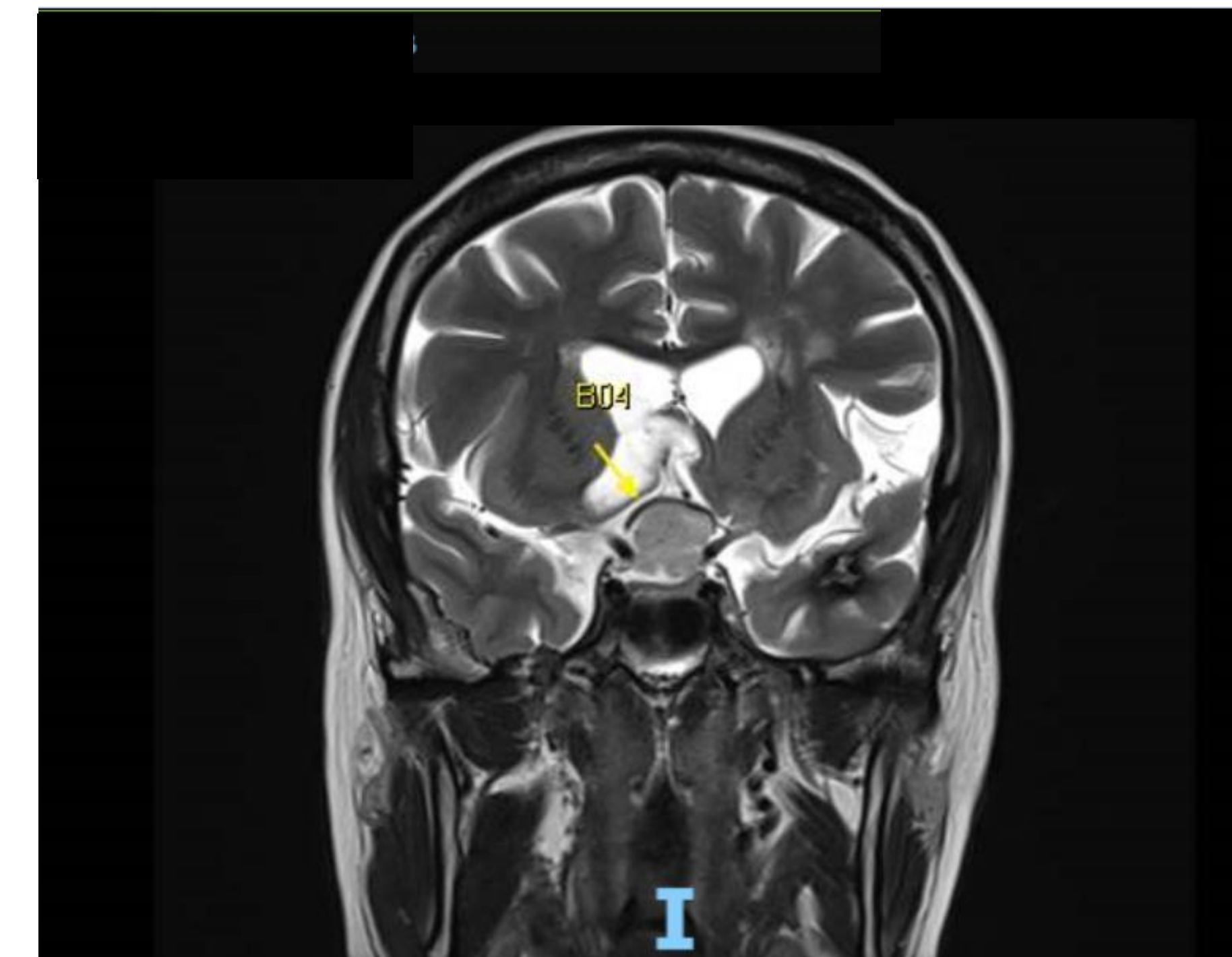


Figure 2. Superior deviation of the optic chiasm due to mass effect on the pituitary gland



Figure 3. Extension of the mass laterally to the bilateral cavernous sinus



Figure 4. Extension of mass to medial aspect of the right middle cranial fossa.

Discussion

The diagnosis of meningioma in pregnancy is challenging due to its rare incidence. Most common presenting symptoms include visual disturbances, headaches, weakness, and seizures.³ These may overlap with common conditions diagnosed in pregnancy such as hyperemesis gravidarum, eclampsia, and postpartum psychosis. Prompt diagnosis and treatment of brain tumors is crucial. In the context of persistent neurological deficits, early brain imaging should be considered to rule out intracranial lesions. Management requires multidisciplinary and individualized treatment.⁴ Surgery is curative. However, the challenge lies in determining timing of surgery. While current literature supports deferment of surgery to postpartum period, prompt neurosurgical interventions should be considered for patients with significant neurological symptoms. In this case, early neurosurgery allowed patient to avoid permanent neurological deficits and continue pregnancy to term.

Managing meningiomas in pregnancy is complex and a multidisciplinary approach is required to provide individualized care.

References

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