

Pregnancy Outcome for Patient with Intracranial Meningioma

Ahmed Farrag¹, Shabin Joshi², Narasimha Murthy³, Vandana Dhingra⁴



University Hospitals
Coventry and Warwickshire
NHS Trust

¹ Specialist Registrar, Obstetrics and Gynaecology, University Hospitals Coventry and Warwickshire NHS Trust, Coventry CV2 2DX, UK

² Consultant in Neurosurgery, University Hospitals Coventry and Warwickshire NHS Trust, Coventry CV2 2DX, UK

³ Consultant in Endocrinology and Diabetes, University Hospitals Coventry and Warwickshire NHS Trust, Coventry CV2 2DX, UK

⁴ Consultant in Obstetrics and Gynaecology, University Hospitals Coventry and Warwickshire NHS Trust, Coventry CV2 2DX, UK

Objective

We aim to report a case of meningioma in pregnancy with successful outcome.

Case Report

A 36-year-old woman, gravida 5, parity 4, with 4 previous normal vaginal deliveries was seen in Maternal medicine antenatal clinic at 18 weeks of gestation due to several risk factors including a recent incidental diagnosis of left partial meningioma. She was diagnosed four month prior to her pregnancy after she attended hospital with unexplained on-going symptoms of vertigo and tinnitus. A Magnetic resonant imaging (MRI) identified a space-occupying lesion with features suggestive of meningioma. She had no symptoms of raised intracranial pressure and decision by the neurosurgical team to monitor the lesion with repeat MRI in 6 month to review if there is any change in size or feature and decide further management. The patient had essential hypertension, Sick cell carrier, raised body mass index of 37 and previous gestational diabetes in her three previous pregnancies. She developed gestational diabetes in her current pregnancy, which was poorly controlled.

The patient reported symptoms of vertigo, tinnitus, and some memory loss. Multi-disciplinary team (MDT) approach was used in managing her care, which involved the obstetrician, neurosurgeon and endocrinologist. She had no progression of her neurological symptoms and it was agreed that she was suitable for normal vaginal delivery. She had induction of labour and progressed to have an uncomplicated normal vaginal delivery at 37+4 week gestation.

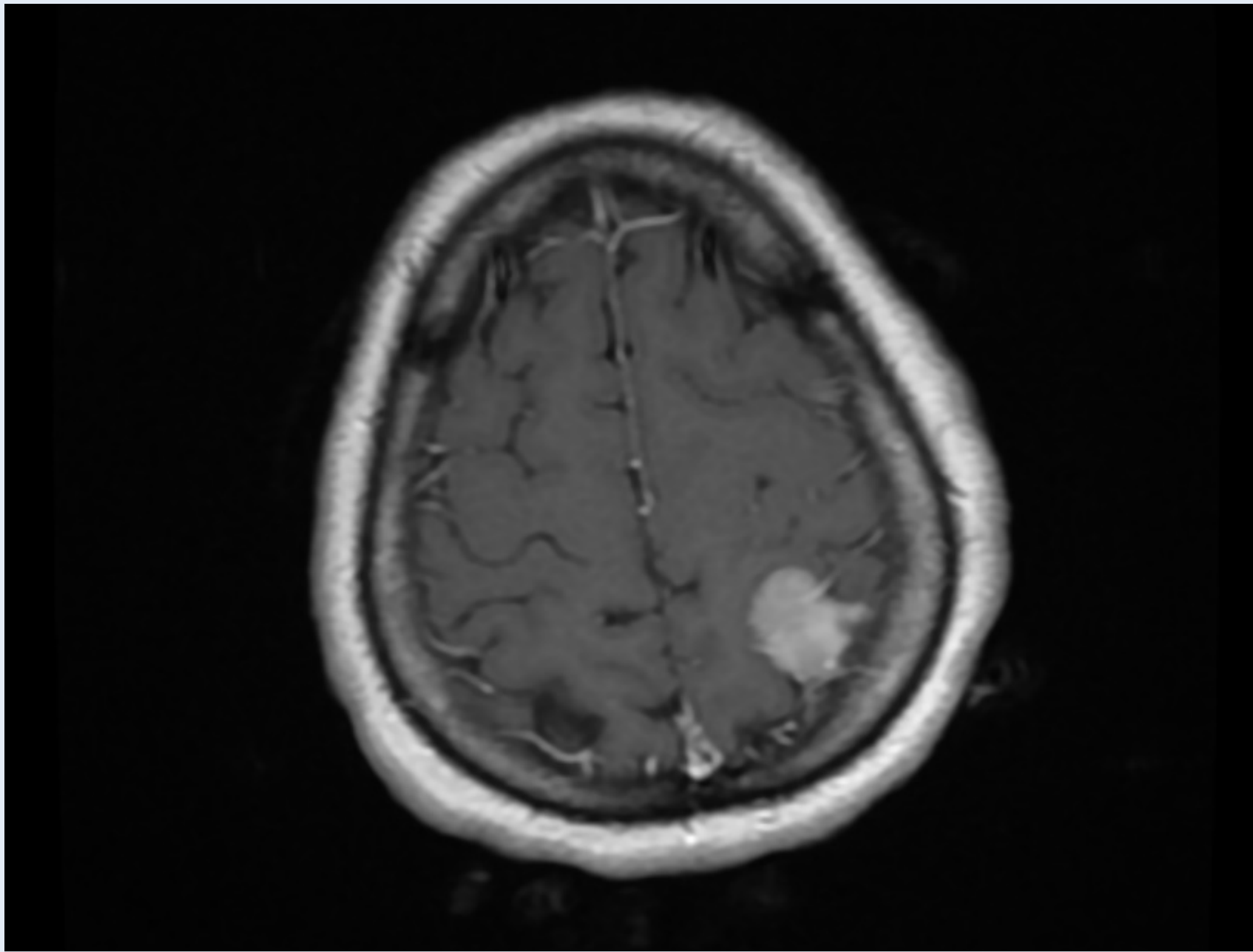


Figure (A): MRI Head - Axial T1 image

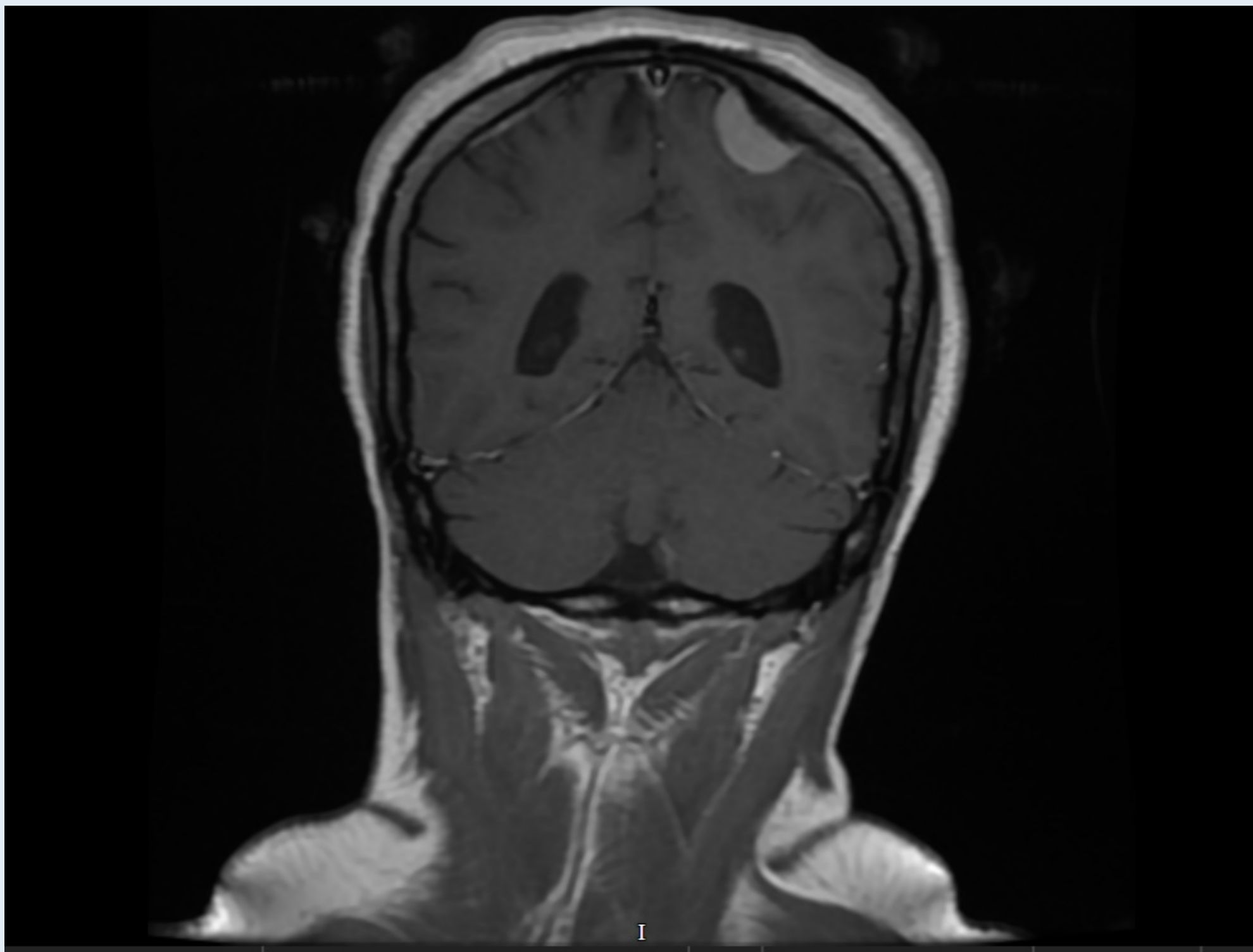


Figure (B): MRI Head – Coronal T1 image

Discussion

Meningiomas account for more than one third of all intracranial tumours. They occur more commonly in elderly and affect women more than men. The exact pathophysiology of these tumours is not clear, however several theories have been suggested such as genetic cause, exposure to radiation or trauma. Meningiomas can grow and progress in size during pregnancy, which can cause symptoms associated with space occupying lesion. Common symptoms involve headache, vertigo and epileptic fits. Visual impairment could happen if the tumour is located in the skull base and this often warrants surgical intervention. Progression of signs or symptoms will require neurosurgical review and further investigation with MRI. Surgical intervention during pregnancy could be mandatory if there is severe deterioration of the neurological symptoms of the mother.

Conclusion

Management of a case of Meningioma in pregnancy require multidisciplinary team approach. Close monitoring of these patients in pregnancy is essential due the risk of progression and need for surgical intervention. Our case shows that successful uncomplicated normal vaginal delivery is possible with good outcome.