

EP15.65. Symptomatic meningioma during pregnancy: a two-case series

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Introduction

Meningioma during pregnancy is rare (5.6/100,000 pregnancies). Hormonal changes, particularly elevated progesterone, may promote tumor growth and neurological symptoms. We report two cases with distinct presentations and management: Case 1, diagnosed in the third trimester with focal neurological deficits, requiring delivery followed by postpartum resection; and Case 2, diagnosed in the second trimester with isolated headache and managed expectantly.

Table 1. Patient Characteristics

	Case 1	Case 2
Age	26	36
Obstetric history	G2A1P0	G4P2C2A1V3
Gestational age at diagnosis	33,5	17,3
Clinical presentation	Right-sided peresthesia, dysarthria	Severe retro-orbital headache
Imaging	Brain MRI with contrast	Magnetic resonance imaging with angiography (phase-contrast technique)
Lesion location	Left frontoparietal	Left frontal
Management	Postpartum surgery (Left parietal craniotomy for meningioma resection after cesarean section at 35 weeks)	Expectant (cesarean section at term >37 weeks)

Clinical Presentation

Tumor location determines symptoms, which may include headache, focal deficits, and seizures, sometimes mimicking pre-eclampsia and delaying diagnosis. A high index of suspicion is needed for progressive or atypical neurological symptoms. MRI is the preferred imaging modality during pregnancy; gadolinium is generally avoided but may be considered when diagnostic benefits outweigh potential fetal risks.

Maternal Complications

Intracranial hypertension and seizure, may compromise both maternal and fetal outcomes, increasing the risk of preterm birth. Management should be individualized according to neurological status, tumor characteristics, gestational age and fetal well-being. A multidisciplinary approach involving obstetrics, neurology and neurosurgery is essential.

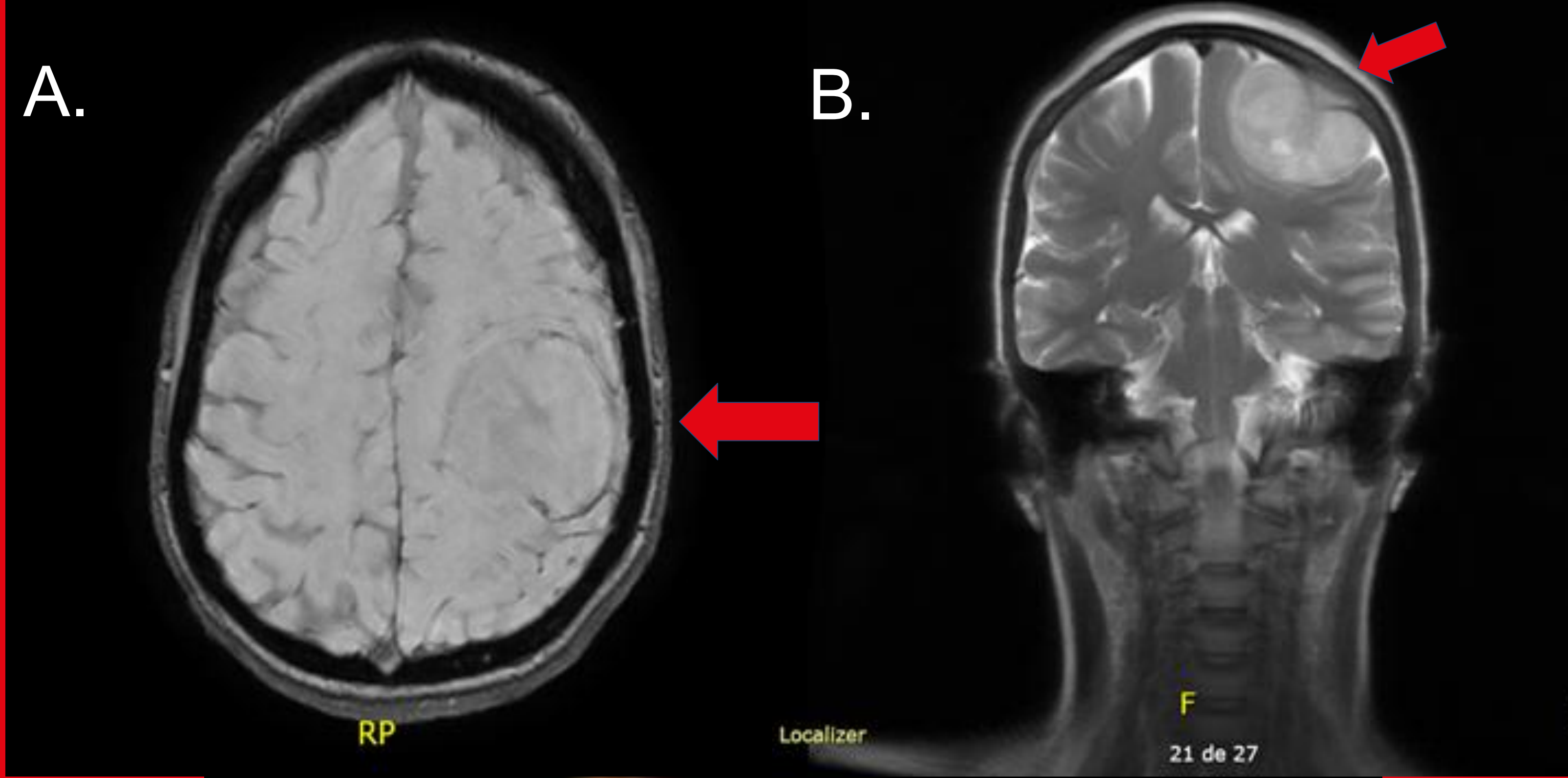


Figure 1. Case 1: MRI with contrast: Stable left parietal convexity meningioma with local frontoparietal mass effect and no midline shift. in axial (A) and coronal (B) sections.

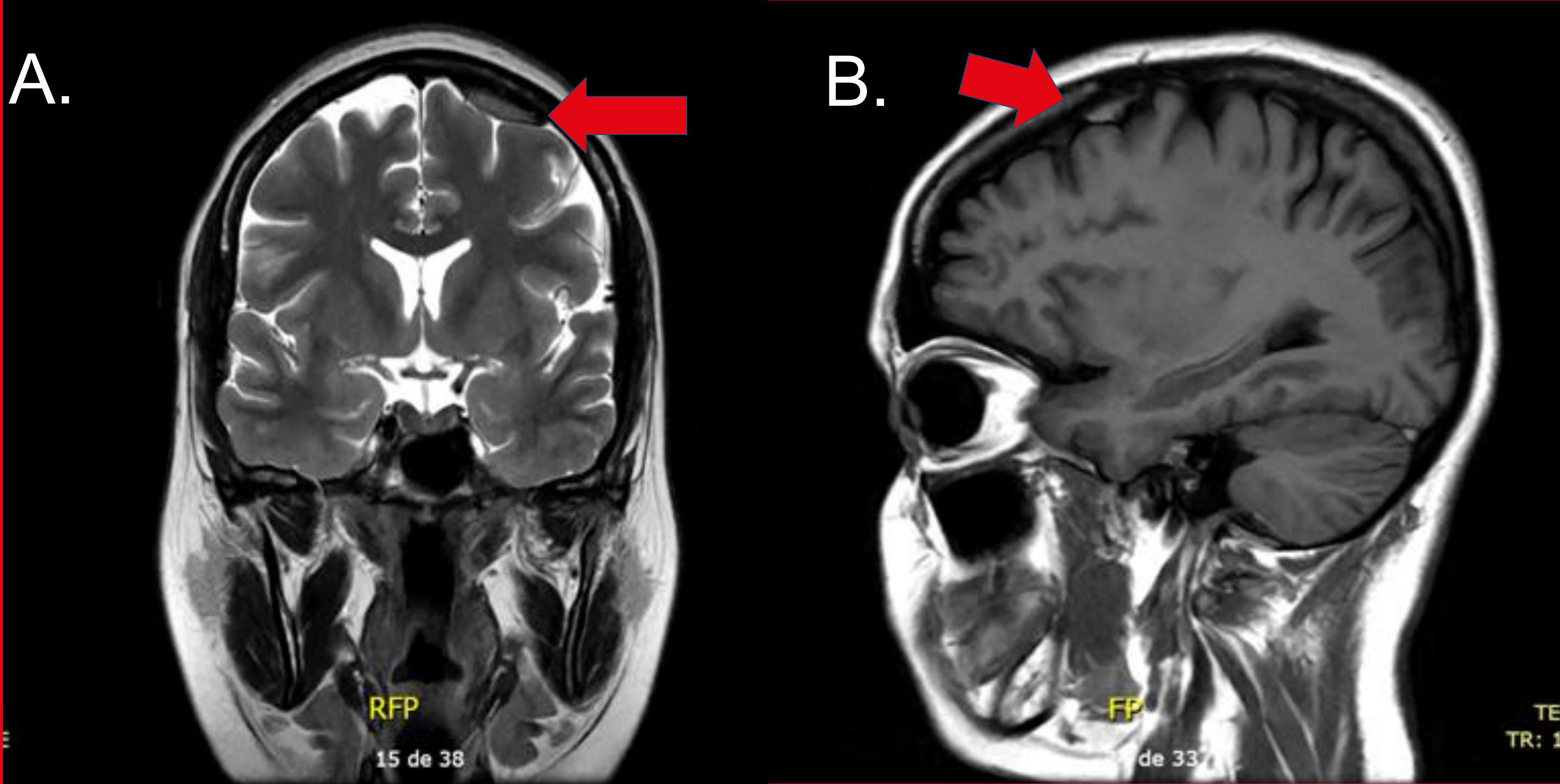


Figure 2. Case 2. Magnetic resonance imaging with angiography: Small typical left frontal meningioma adjacent to the superior and middle frontal gyri, without brain compression; in coronal (A) y sagittal (B) sections.

Conclusion

Expectant management with close monitoring is feasible in stable patients, allowing pregnancy to continue to optimal gestational age. Surgery is reserved for neurological deterioration or significant mass effect, balancing maternal and fetal risks. Gadolinium contrast may be considered when essential for diagnosis, weighing its benefits against potential fetal risks.