



MAGNETIC RESONANCE IMAGING IN SPINAL PATHOLOGY; CAN WE IMPROVE MATERNAL CHOICE?



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INTRODUCTION

- Neuraxial anaesthesia (NA) is the preferred anaesthetic technique for caesarean section (CS)
- Anaesthetists are increasingly being challenged with complex comorbidities including spinal pathologies and anatomical variations
- We present a case of the use of magnetic resonance imaging (MRI) in an antenatal patient presenting with significant lumbosacral swelling, who was denied NA for a previous CS

Timeline

Patient with familial adenomatous polyposis and lumbosacral swelling

Baby 1: Emergency CS under GA. NAB denied

Baby 2: Anaesthetic pre-op assessment

Antenatal MRI

Elective CS under NAB

CASE REPORT

A 37-year-old multiparous patient for an elective CS was referred for anaesthetic assessment due to a large swelling over the lumbosacral area. Past medical history includes familial adenomatous polyposis with positive genetic testing. She was predisposed to cysts and polyps resulting in multiple previous bowel surgeries for the excision of colonic polyps. Her previous CS was performed under general anaesthesia, as a differential diagnosis of spina bifida meningocele could not be excluded and NA was considered contraindicated. For this CS the patient was requesting to be awake, and NA was the preferred technique to provide optimum post-operative analgesia for the complex surgical abdominal history. We offered an antenatal MRI to assess spinal anatomy and plan for anaesthesia. This demonstrated a large well defined cystic lesion confined to the subcutaneous tissue at the level of the lumbosacral junction, with no spinal extension. CS was performed under spinal anaesthesia without complication, with the patient expressing great satisfaction with her perioperative care.

References

1. Gatta G, Di Grezia G, Cuccurullo V *et al.* MRI in Pregnancy and Precision Medicine: A Review from Literature. *Journal of Personalised Medicine.* 2021 Dec 23;12(1):9

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DISCUSSION

- Unenhanced MRI is a safe radiation free investigation in pregnancy
- It is commonly used for screening placental and foetal abnormalities, as well as investigating pregnant women presenting with acute pathology
- Utilising antenatal MRI screening of patients with spinal pathology can offer safe NA where it may previously have been contraindicated
- We advocate the routine use of MRI screening in women with confirmed or suspected spinal pathology to optimise maternal choice of anaesthetic management

Sagittal MRI showing a large subcutaneous cystic lesion at the level of the lumbosacral joint

