

Post-Partum Neuropathy: A Review of 68 Cases at the Princess Royal Maternity Hospital

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Introduction

Neuraxial anaesthesia is widely used in obstetric practice. Post-natal neuropathy is rare, but impactful. We aimed to characterise the presentation, investigation, management and outcomes of women assessed for new-onset neurological symptoms following central neuraxial block (CNB) in a tertiary referral unit over an eight-year period.

Methodology

Caldicott approval was obtained to retrospectively review notes for women who underwent anaesthetic assessment for new neurological symptoms following CNB at the Princess Royal Maternity Hospital between November 2017-January 2025. Data comprised post-natal neurology forms, paper and electronic case notes.

Table 1: Risk Factors for Neurological Injury

Risk Factor	n (% Total)
Obesity Alone	26 (38%)
+ Diabetes	2 (3%)
+ Macrosomia	2 (3%)
+ Prolonged second stage of labour	3 (4%)
Obesity Total	33 (49%)
Prolonged second stage of labour alone	3 (4%)
Diabetes alone	1 (2%)
Congenital kyphoscoliosis	1 (2%)
Total	38 (60%)

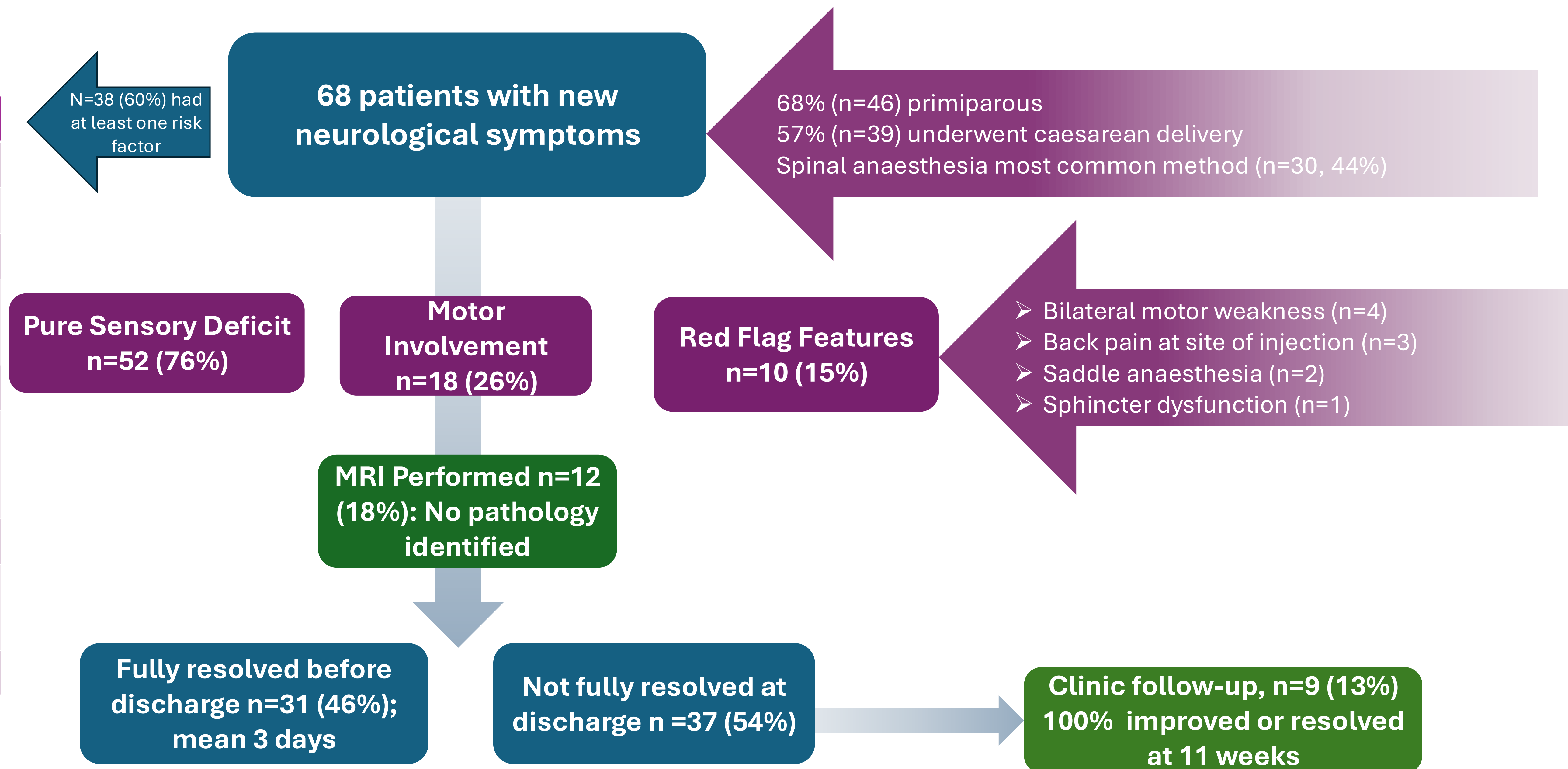


Table 2: Patterns of Neurological Signs Observed

Sensory Deficit	No motor deficit	Unilateral motor deficit	Bilateral motor deficit	Total
None	3 (4%)	3 (4%)	1 (1%)	7 (10%)
Unilateral	34 (50%)	8 (12%)	1 (1%)	43 (63%)
Bilateral	15 (22%)	1 (1%)	2 (3%)	18 (26%)
Total	52 (76%)	12 (18%)	4 (6%)	68 (100%)

Data are presented as total numbers (N) and proportions (%)

References

[1] Sinnot M, Fernando R. Postpartum neuropathies. Curr Anesthesiol Rep. 2023;13: 49-58

[2] Royal College of Anaesthetists. NAP3: Major Complications of Central Neuraxial Block in the United Kingdom. Available from: <https://www.rcoa.ac.uk/research/research-projects/national-audit-projects-naps/nap3-major-complications-central-neuraxial>

Conclusion and Discussion

- Post-partum neurological symptoms following CNB were **predominantly sensory deficits consistent with obstetric nerve palsies** rather than anaesthetic related nerve injury. [1]
- No evidence of permanent or serious neuraxial complications** was identified, in keeping with national audit data. [2]
- Imaging appropriately targeted to red flag features, supporting current recommendation for early investigation. [1]
- Findings reinforce the safety of CNB in obstetric anaesthesia.**
- Structured assessment and follow-up pathways optimise patient outcomes.