Documentation of neuraxial block adequacy prior to caesarean section: A review of local practice against national recommendations

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Introduction

Clear and accurate documentation of neuraxial block assessment is a fundamental component of safe obstetric anaesthetic practice and provides essential evidence in the event of patient concern or medicolegal challenge.

Obstetric anaesthesia carries a recognised medicolegal burden, with pain during caesarean section representing a cause of successful litigation. National guidance recommends documented assessment of block adequacy prior to skin incision. [1] [2]

This service evaluation assessed local compliance with these recommendations.

Methods

A retrospective review of anaesthetic charts for caesarean sections performed under regional anaesthesia (spinal or epidural top-up) between 19 December 2025 and 8 January 2026 was undertaken.

Data were extracted from scanned anaesthetic charts on the electronic maternity record system (BadgerNet). Documentation was assessed against four parameters recommended in national guidance:

· Upper sensory level to light touch to T5 or above
· Lower sensory level to light touch
· Degree of motor block
· Documentation of maternal comfort or pain during delivery

Results

Fifty-one anaesthetic records were reviewed (42 spinal anaesthetics, 9 epidural top-ups).

· Upper sensory level to T5 or above was documented in 48 cases (94%)
· Lower sensory level in 28 cases (55%)
· Motor block in 47 cases (92%)
· Maternal comfort or pain during delivery in 33 cases (65%)

Complete documentation of all four parameters was present in 22 cases (43%). Pain during caesarean section was documented in one case, and there were no conversions to general anaesthesia.

The overall annual caesarean section rate within the unit is 48%.

Discussion

Documentation of neuraxial block assessment prior to caesarean section demonstrated inconsistent compliance with national recommendations, particularly regarding lower sensory level assessment and documentation of intraoperative pain.

Several limitations should be acknowledged. Data extraction was performed exclusively from scanned paper anaesthetic charts uploaded to BadgerNet. However, anaesthetic documentation within the department occurs across two platforms: a paper chart and electronic entry on BadgerNet. As paper charts are subsequently photographed and uploaded, it is possible that some information was recorded electronically but not on the paper chart, leading to potential underestimation of compliance.

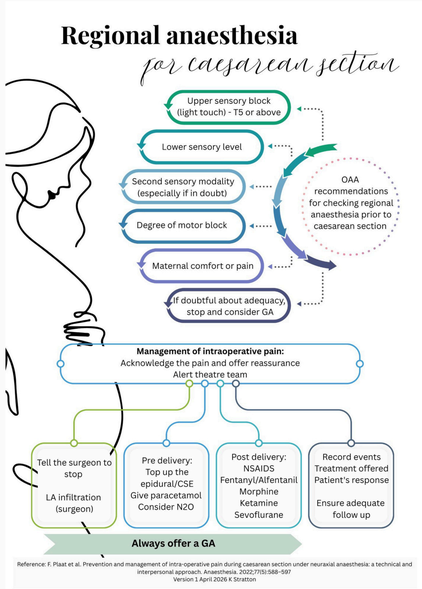
This limitation highlights a broader systems issue. These findings will be raised at the local clinical governance meeting, with discussion focused on transitioning toward fully electronic documentation on BadgerNet. This would not only improve data completeness and accessibility but also support efforts to reduce paper usage and associated CO_2 emissions.

In response to the findings, an infographic has been developed and implemented within the department. This resource clearly outlines the Obstetric Anaesthetists' Association (OAA) recommendations for assessing regional anaesthesia prior to caesarean section, alongside guidance on the recognition and management of intraoperative pain. The infographic has been disseminated across the department and displayed in theatre environments to act as an aide-mémoire, with particular benefit anticipated for junior anaesthetists.

Conclusion

Documentation of neuraxial block assessment prior to caesarean section demonstrated variable compliance with national recommendations. These findings highlight opportunities to improve documentation practice, enhance medicolegal protection, and raise awareness of intraoperative pain recognition and management.
The results will be disseminated locally to support education and inform future quality improvement initiatives.

Figure one: Infographic implemented and distributed within our Obstetric department, based on OAA guidance.



References

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2. Plaat F, Stanford SER, Lucas DN et al. Prevention and management of intra-operative pain during caesarean section under neuraxial anaesthesia: a technical and interpersonal approach. Anaesthesia. 2022;77(5):588–597. doi:10.1111/anae.15717.