Correspondence

Dr Sophie Collinson
Department of Anaesthesia
Wythenshawe Hospital
Manchester

Observations on inadequate neuraxial anaesthesia and patient-centred care

S. Collinson[1], C. Shelton[2], and D. Eusuf[2]

1 Specialty Trainee, North West School of Anaesthesia, Health Education England North West, Manchester, UK.
2 Consultant, Department of Anaesthesia, Wythenshawe Hospital, Manchester University NHS Foundation Trust, Manchester, UK.

Corresponding author: sophie.collinson1@nhs.net

Twitter: @xx

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Dear Editor,

We enjoyed discussing the systematic review on inadequate neuraxial anaesthesia for elective Caesarean section by Patel et al [1], at our obstetric anaesthesia journal club. We found it to be both interesting and relevant to practice. Together with the recent recommendations on the prevention and management of failed neuraxial anaesthesia by Plaat et al [2], Patel's review generated lively discussion among colleagues regarding personal experiences of relevant cases, and has prompted a quality improvement project regarding failed neuraxial anaesthesia with the intention to develop a trust-wide protocol for its identification and management. We do, however, wish to highlight some of the limitations identified during our discussion.

The definition of 'inadequate' neuraxial anaesthesia is an obvious point of uncertainty. In the context of Caesarean section, there remains no universally accepted agreement, inviting subjective interpretation by individual anaesthetists. For the purposes of their review, Patel et al defined inadequate neuraxial anaesthesia as 'the need to convert to general anaesthesia; the need to repeat or abandon a planned primary neuraxial anaesthesia technique following skin incision; the unplanned administration of intra-operative analgesia or epidural drug supplementation' [1]. Whilst these definitions represent objective and measurable medical interpretations of failure, we note that they are based entirely on the *actions* of the anaesthetist, with no weight whatsoever placed on the *experiences* of the patient. Stanford, a patient who described her own primary experience of failed neuraxial anaesthesia in 2010, eloquently outlines the significance of this methodological decision from the patient's point of view in a linked editorial [3], and – noting the risk of confirmation bias amongst anaesthetists – raises the concern that although Patel et al calculated a perhaps surprisingly high prevalence of inadequate neuraxial anaesthesia (14.6%), they may nevertheless have 'gravely underestimated the issue'.

Prevalence of inadequate neuraxial anaesthesia was the primary outcome in Patel's review [1], but is it the most important outcome? We suggest that inadequate neuraxial anaesthesia, if identified early enough, need not *necessarily* affect patient experience beyond the need to modify or supplement the anaesthetic. However, this requires close communication with both patient and surgeon, and swift and effective intervention. Importantly, Patel's review yields little information regarding the timepoints at which neuraxial anaesthesia was deemed inadequate – whilst repetition or abandonment of a planned neuraxial technique had to occur 'after skin incision', the timepoints at which general anaesthesia or epidural supplementation were performed were unspecified [1]. Furthermore, we noted that interventions for 'women who experienced 'pulling' or 'tugging' during surgery, anxiety and unexpectedly prolonged surgery where additional epidural anaesthesia was administered pre-emptively' were included in the definition of 'inadequate' [1]. These actions, we suggest, may be more indicative of patient-centred care than of failed anaesthesia.

When it comes to poorly performing neuraxial anaesthesia we must not fail to communicate, to listen, to question our biases and to intervene. Whilst any medical procedure can fail, when it comes to patient-centred care, 'failure is not an option'.

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References

1. Patel R, Kua J, Sharawi N et al. Inadequate neuraxial anaesthesia in patients undergoing elective caesarean section: a systematic review. *Anaesthesia.* 2022; 77: 598-604
2. Plaat F, Stanford SER, Lucas DN. Prevention and management of intra-operative pain during caesarean section under neuraxial anaesthesia: a technical and interpersonal approach. *Anaesthesia*. 2022; 77(5): 588-597
3. Stanford SER. What is 'genuine' failure of neuraxial anaesthesia? *Anaesthesia.* 2022; 77: 523-526