A Survey of Anaesthetists’ Experiences of Wrong-Site Regional Anaesthetics

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Introduction
Wrong site surgery should not happen. According to the National Patient Safety Agency (NPSA) it is a ‘Never Event’. A serious, preventable incident that should not occur if the available preventative measures have been implemented.

Although the prevention of wrong site procedures is now a priority, wrong site regional blocks have often been overlooked, and despite their potential for serious harm to patients are excluded from the ‘Never Event list’. The WHO Surgical Safety Checklist has been introduced in part to prevent wrong site procedures and reduce the risk of harm from anaesthetics, but is often performed in theatre after blocks have been administered.

After two wrong site block incidents during the last two years at our institution, we reviewed the literature surrounding the subject and found there were few case reports and little information specifically related to wrong site regional procedures. We surveyed anaesthetists to gain insight into their experience of wrong site regional blocks, local practices and their opinions of current and possible checking procedures.

Methods
A voluntary, anonymous online survey was performed among anaesthetists of all grades in the North West region.

No time limit was set on the reporting (i.e. reports from any time in the past were included).

Results
152 responses were included in the analysis.

40 respondents had performed a wrong site block at some point in their career.

46% (68) of the wrong site blocks were performed on awake patients.

Have you ever performed a regional block at the wrong site?

Have you ever been stopped by someone else?

If you have performed a block at the wrong site, was the patient awake or asleep?

46% (68) of the wrong site blocks were performed on awake patients

Do you think that anaesthetists should follow a specific checking procedure for regional blocks?

43% (65) respondents thought that a correct site marking should be included in WHO Surgical Safety Checklist.

Conclusions
Our survey identifies 40 cases of wrong site regional blocks. Despite its limitations, this suggests that the phenomenon of wrong site regional blocks is more common than is generally perceived.

We question whether current methods of ensuring correct site blocks are adequate. Despite all surgical sites now being marked, wrong site blocks still occur and correct checks are often distant in time from the block itself.

Relevance of verbally checking with the patient is limited. However, 46% of the blocks identified in this survey were on awake patients, as any errors can be detected at the time by the patient themselves. Where there are differing opinions of the correct site, suggesting a lack of understanding of the procedure.

Although most respondents felt that some form of checking procedure should occur, there was some variation in the method. Several people said that they would not need extra checks or that current safeguards are sufficient, even when they themselves had reported failures.

According to the National Patient Safety Agency (NPSA) it is a ‘Never Event’: a serious, preventable incident that should never happen. However, it is clear from the literature that incorrect site blocks are a phenomenon of wrong site regional blocks.

The WHO Checklist is now mandatory in the UK, but a significant proportion of doctors have reservations about its usefulness, including timing of the checks, its complexity and also a lack of evidence that it is effective.

Since this matter has been highlighted by the NPSA, and national data will be gathered from online reporting systems, we will hopefully benefit from this new information and develop a safer, more effective and evidence-based method of correct site checking before anaesthesia. We may even wish to change the WHO checklist to fit future Events to emphasise their significance.

The phenomenon of wrong site regional blocks becomes more widespread as we hope that the attitudes and practices of clinicians will be instrumental in its prevention in the future.

Conclusion: How do wrong site blocks happen?

Case Studies

Case 1
A 52 year old male was scheduled for a right distal bisected capsule repair under general anaesthetic with an interscalene block.

No pre-operative assessment and all routine checks were performed in the anaesthetic room. The right upper arm was marked by the surgeon.

Four staff were present: anaesthetic consultant, anaesthetic trainee, GDS and trainee (ODP).

Spinal anaesthetic was used.

Site was cleared and covered with sterile drape.

Interscalene block was performed uneventfully, using ultrasound and a nerve stimulator.

On removal of the drape it was realised that the block had been performed on the wrong side.

Surgery proceeded with opioid analgesics and morphine PCA post-operatively.

Case 2
A 45 year old male was scheduled for an elective left knee replacement under spinal anaesthetic with foot and sacral blocks.

Pre-operative assessment showed no co-morbidities but the patient spoke little English.

All routine checks were performed, including the patient being asked if it was the right side, which was confirmed by the patient.

Femoral and sciatic blocks were performed using a nerve stimulator.

After the anaesthetist was persuaded to apply the surgical site marking was noticed on the opposite knee.

The surgery proceeded under spinal anaesthetic after a femoral block was performed on the correct side.

References
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Acknowledgements
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