

Survey of practice of anaesthesia for obstetric perineal tears

Dr Martin Ince, Dr Ross Clark
St Mary's Hospital, Manchester, UK

Introduction

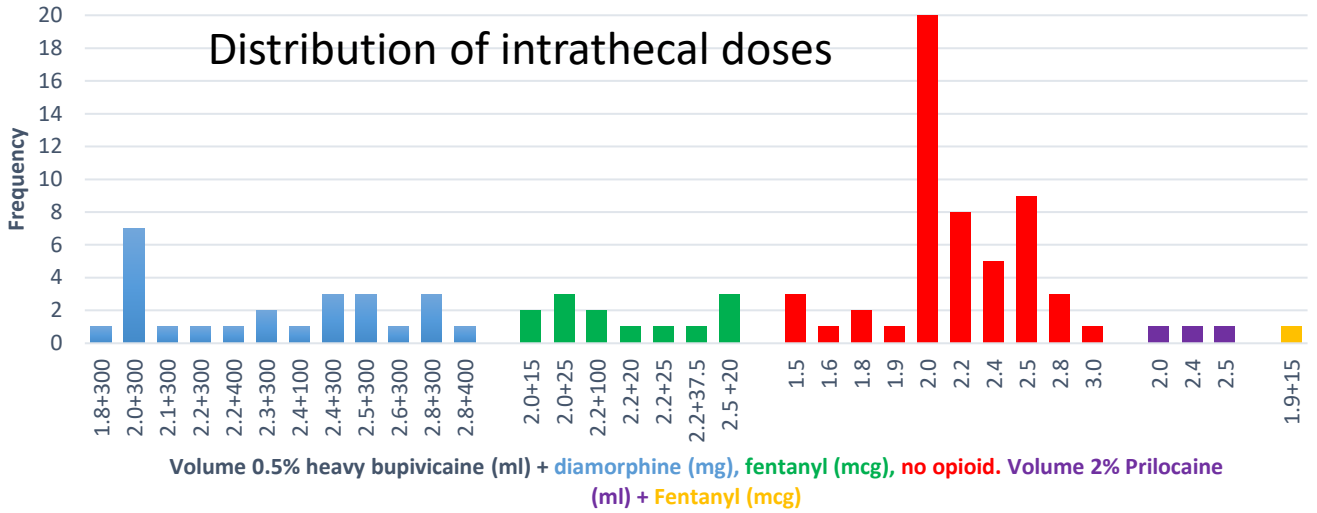
Standardised drug dosing for neuraxial blockade has logical benefits: familiarity amongst staff, especially when teaching junior team members, as well as potential for reducing harm from both conscious and unconscious drug errors. Guidance exists for intrathecal drug dosage in caesarean section[1], however, the same is not true for repair of perineal tears where there is wide variation in practice.

Methods

We conducted a region -wide survey of anaesthetists, sent electronically to all anaesthetists practising obstetric anaesthesia in the North West of England, covering a total of 12 hospitals. Questions examined choice and dose of local anaesthetic as well as use of intrathecal opioid when providing neuraxial blockade for an uncompromised healthy woman undergoing an uncomplicated repair of perineal tear. Information was requested on target block height and modalities for testing. Data are presented as mean ±SD [range].

Results

96 responses were received. 30% were consultants or SAS doctors, 58% senior trainees or senior clinical fellows, 12% junior trainees or junior clinical fellows. 95% chose bupivacaine, with the rest choosing prilocaine. Prilocaine use was greater than average in only the consultant/SAS group with 7% of this group favouring prilocaine. Mean dose of bupivacaine was 11.1±1.53 [7.5-14] mg. There was no significant difference between the groups for dose of bupivacaine used. Mean dose of prilocaine was 43.2±5.4 [38- 50] mg. Opioid use was highest amongst the junior trainee/clinical fellow group with 54% using an intrathecal opioid vs. 41% in the senior trainee/clinical fellow group and 45% in the consultant/SAS group. Intrathecal diamorphine was preferred over fentanyl in all groups. Target block height ranged from T4 to S1 with junior trainee/clinical fellows favouring a higher block T10±4 vs. senior trainees/clinical fellows T12±4 and consultants/SAS T11±3. All bar one used response to cold as a modality for assessment, however only 62% would test motor and just 32% would test light touch, with consultants/SAS most likely to do so (41%). Senior trainees/clinical fellows were most likely to test at least two (71%) or three (35%) modalities. Junior trainees/clinical fellows were least likely to test more than one modality (64%) and only 27% who would test three.



Discussion

There is considerable variation in practice between anaesthetists in this setting. We believe this is at least in part due to the lack of evidence to support standard practice. Some outliers in the junior group were noted to be using high doses of local anaesthetic or opioid that would likely be associated with unnecessarily increased maternal side effects. A number choose to only test a single modality for which evidence suggests may be an unreliable indicator of block to surgical stimulus[2]. This survey highlights the need for further research and guidance in the areas of dosage and testing of block for this procedure.

References

1. Lucas N, Johnston C. Raising the Standards: RCoA quality improvement compendium. 2020. https://rcoa.ac.uk/safetystandards-quality/support-anaesthetic-departments/raising-standardsrcoa-quality-improvement
2. Ode K, Selvaraj S, Smith AF. Monitoring regional blockade. Anaesthesia 2017;72 (Suppl 1):70–5.