

**Results** 10 responses were collected from the SBYB survey. All RA techniques performed SBYB; however, only 60% were documented. There was confusion over when SBYB should be performed, with some checking immediately prior needle insertion and others 30–45 minutes before block performance at ‘WHO Sign In’.

globally improve postoperative analgesia without increasing side effects such as postoperative nausea.

**Abstract B443 Table 1**

Table 1: Results from Surgical Site Marking Questionnaire

Surgical Site Marking (SSM) questionnaire responses	n=45
Correct labelling of mark on multiple sites	n=5 ( 100%)
Labelling with water insoluble pen	n=41 ( 91%)
Marking using correct arrow symbol	n=41 ( 91%)
Checking the surgical mark at the WHO Time Out	n=38 ( 84%)
Visibility of mark after prepping and draping	n=29 ( 65%)

**Conclusions** Although SBYB is performed routinely, we found scope to improve documentation and ensure better adherence to national guidance. Following departmental teaching, we placed SBYB posters throughout, created specific RA procedure trays, and created reminders on our online documentation. These changes were reflected in our locally created protocol. Currently, we seek to improve SSM through liaison with our surgical colleagues, and increasing the vigilance of theatre staff undertaking appropriate checks.

**Abstract LB1 Table 1**

Trial	Adjuvant	LA	Surgery	PNB	Primary outcome	Secondary outcomes	Side effects
Koerf et al. 2015	2 groups TG: PN buprenorphine 0.3 mg + AL CG: AL	Bupivacaine 0.25% + Adrenaline	TKA TG: 28 p CG: 20 p	FNB	Lower mean NRS score (P = 0.02) at 12 hours after surgery and persisting up to 72 hours	Prolongation of the analgesic effect by 4.4 hours; Opioid consumption; NS; P satisfaction, comfort, duration of hospital stay; NS	None
Yildiz et al. 2016	4 Groups 1. CG: AL + IV 2. High dose: AL + PN mixture injection 3. Medium dose: AL + PN mixture injection 4. Low dose: AL + PN mixture injection	Ropivacaine: 0.375% for control and high dose groups, 0.2% for medium dose group, 0.1% for low dose group	TSA 20 p in each group	ISB	Lower mean NRS pain score with movement at 24 hours in medium group (p=0.034)  No differences between control and either Low Dose or High Dose's group	Less pain with movement at the POD1 in high dose group vs control (p=0.02)  More pain in low dose's group vs control at rest and movement in PACU  Greater hand/grip strength in the PACU in low dose group  Time to opioid rescue: NS	None
Sandroy H et al. 2016	2 groups: TG: AL CG: AL + PN buprenorphine 0.2 mg	Bupivacaine 0.25%	TKA CG: 49 p TG: 48 p	ACB	Reduction of opioid use in the first 24 hours (p=0.01)	nausea, vomiting, and pruritis: NS	None
Van Beek et al. 2017	Control Group: AL Group B: PN injection of AL + Buprenorphine 0.2 mg Group S: AL + (Buprenorphine 5C injection of 0.2 mg)	Ropivacaine 0.2% + epinephrine	TKA 21 p in each group	FNB	Time to first rescue analgesic: NS	Less opioids' consumption in buprenorphine group: 5; PONV and itching: NS  Quality of sleep in buprenorphine groups: 5 OAS: NS	None
Williams et al. 2022	2 cohorts: 2 groups in each cohort; CG: bupivacaine TG: bupivacaine + dexanmethasone (1mg) + dionidine (15 mg) and Buprenorphine (300 mcg)	Bupivacaine 0.1 % for L4-S3 blocks  Bupivacaine between 0.2% and 0.25% for L2-L4 blocks*	2 cohorts: Main cohort (THA and TSA); CG: 16 p TG: 62 p Secondary cohort ( THA and TSA); CG: 8 p TG: 29 p	L2-L4 nerve/plexus block L4-S3 nerve/plexus block	SF-MPQ-2 during POD n°1: Greater pain reduction in both continuous and intermittent scores of the SF-MPQ-2 in main cohort and NS for secondary cohort	mDVPRS: favored the test group in main cohort but NS for secondary cohort  PONV: NS in the main cohort; Standing balance test: NS	NS

**Footnote:** CG: control group; TG: test group; TKA: total knee arthroplasty; TSA: total shoulder arthroplasty; THA: total hip arthroplasty; p: patients; PN: perineural; NS: non-significant; IV: intravenous; ISB: interscalene nerve blockade; FNB: femoral nerve block; ACB: adductor canal block; NRS: numeric rating scale; POD1: post-operative day 1; PACU: post anaesthesia care unit; PONV: post-operative nausea and vomiting; OAS: overall benefit of anaesthesia score; S: Significant; SF-MPQ-2: Short Form McGill Pain Questionnaire+2 (SF-MPQ-2); mDVPRS: modified Defense and Veterans Pain Rating Scale. \*an injection of 0.2% of Bupivacaine was administered for diabetic patients, 0.25% of bupivacaine for non-diabetic persons. P value <0.05 was considered statistically significant.

**Latebreaker**

LB1

**EFFICACY OF BUPRENORPHINE AS ADJUVANT IN PERIPHERAL NERVE BLOCKS DURING TOTAL JOINT ARTHROPLASTY: A NARRATIVE REVIEW AND SYNTHESIS OF THE EVIDENCE**

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**Background and Aims** The duration of peripheral nerve block (PNB) is of critical importance in the pain trajectories of total joint arthroplasties (TJA). Rebound pain increases opioid consumption and worsens the patient’s functional outcome.<sup>1</sup>Continuous PNBs have a failure rate of 20% to 50% and they are associated with complications such as systemic local anesthetic toxicity, local infection, nerve irritation, and an increased risk of postoperative falls.<sup>2</sup>Among the alternatives studied to improve PNB analgesia, buprenorphine, a partial μ-opioid receptor agonist and weak κ-opioid receptor antagonist, has a good efficacy and safety profile.<sup>3</sup>The objective of this narrative review is to summarize the evidence about buprenorphine as perineural adjuvant to prolong analgesia after TJA.

**Methods** Approval from the ethical committee was not necessary for this narrative review. Two independent reviewers searched several databases (Pubmed, Embase) for articles related to the use in TJA (hip, knee, shoulder) of buprenorphine as a perineural adjuvant in PNB with or without other adjuvant molecules. Articles included were those published through March 2022 and in English.

**Results** 5 randomized clinical trials (RCT) were identified (table 1). 3 trials for TKA, 1 for TSA and 1 trial for both THA and TKA. In all these 5 RCT, buprenorphine is used perineurally with local anesthetics in nerve blocks.Perineural buprenorphine alone or in combination with other adjuvants

**Conclusions** Buprenorphine is effective in improving analgesia during TJAs. However, the evidence is still weak and further trials on this topic are needed.

LB2

**PREP, STOP & BLOCK**

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**Background and Aims** To audit on the change of protocol for Peripheral nerve blocks(PNBS) to avoid inadvertent wrong sided block in a tertiary hospital of Dublin. This audit is based on modified version of traditional ‘Stop before you block’ protocol introduced in 2021.

**Methods** This audit was based on questionnaires given to each Operation theatre anaesthesia room for the nurses and doctors to fill out after PNBS.The duration of audit was of 1 month from 4<sup>th</sup> March 2022 to 4<sup>th</sup> April 2022..All patients records were reviewed for proper recordings in pre designed structured form.

**Results** In this duration,total 52 PNBS were done while only 38 forms were filled for audit. .Among these 38 blocks,30 blocks(78.9%) were forlower limbs,6(15.7%) for upper limbs and 2 (5.2%) for abdominal procedures. The Prep (preparation)of drugs ,equipments and area was done 100% as per hospital policy. However, Stop was done ‘verbally’ only for 15(39.4%) blocks .But ‘mark ‘was checked in 36(94.7%) blocks. Finally, Block was given immediately in 37 (97.3%) blocks and it was delayed in 1 (2.6%) block but Prep,stop was not repeated for that block.

**Conclusions** Conducting an audit on Prep,stop and block protocols is essential for every hospital in which peripheral nerve blocks are done. It avoids the inadvertent wrong sided block

which is a 'never event'. The above audit clearly shows room for improvement.

### LB3 ASEPSIS AND MONITORING DURING US GUIDED PERIPHERAL REGIONAL ANESTHESIA BLOCKS

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**Background and Aims** Ultrasound (US) guided techniques have been preferably used for peripheral nerve blocks. However, to follow aseptic measures for these procedures is still challenging. The purpose of this re-audit is to know the best compliance of the doctors to the asepsis protocols defined on the basis of quality improvement audit done in September 2021 for peripheral nerve blocks using US machine.

**Methods** This was an observational study done in a tertiary Hospital of Dublin in one month duration. A questionnaire was handed to the anesthetic nurses and data was collected with respect to the type of block performed, aseptic techniques employed and the use of monitoring.

**Results** A total of 42 blocks were included in this study; single shot (100%), lower limb blocks (88%) were in majority. Aseptic techniques outlined by the Association of Anaesthetists of Great Britain and Ireland were followed 100% in all cases including use of sterile gloves, drapes, skin decontamination, hand washing and the use of sterile gel and probe cover, except the use of sterile gown (20%). In comparison to the last audit in 2017, the percentages were as follows: Use of sterile gloves (93%), drapes (85%), skin decontamination (93%), sterile gowns (0%) and sterile probe cover (91%). Interestingly, Level 2 monitoring was done by 100% block performers both times.

**Conclusions** In comparison to previous audit, asepsis protocols except for sterile gowns were strictly followed by all the block performers and it has markedly reduced the chances of cross contamination.

### LB4 A CLINICAL AUDIT OF POST-OPERATIVE ANALGESIA IN ELECTIVE CAESAREAN SECTION FOLLOWING NEURAXIAL ANAESTHESIA

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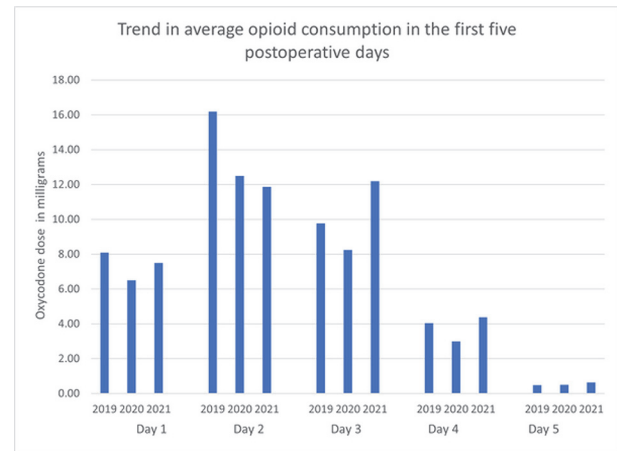
**Background and Aims** Caesarean sections are associated with moderate to severe pain in the post-operative period.<sup>1</sup> Inadequate pain relief may cause delayed recovery, impair mother-child bonding and newborn care, impact maternal psychological well-being,<sup>1</sup> and can lead to persistent pain following caesarean section delivery.<sup>2</sup>

The 2020 PROSPECT guideline for elective caesarean section outlines optimal pain management following elective caesarean sections.<sup>3</sup> Our aim was to review our own analgesic protocols prior to a quality improvement project to institute compliance with these recommendations. We also evaluated opioid use over a three-year period.

**Methods** Ethical approval was granted for this audit, allowing for data collection and analysis of 60 anonymised patients (20 each from November of 2019, 2020 and 2021)

who underwent elective caesarean section with neuraxial anaesthesia. Data were collected on intra-operative anaesthesia and analgesia, post-operative prescribing and administration of regular paracetamol, NSAID, long-acting opioid, and PRN short acting opioid. Using Excel v.2204 we analysed data from each year to assess for changes in analgesic prescribing.

**Results** Mean patient age was 36.2 year ( $\pm 0.7$  years), ranging from 23 to 47 years. Median length-of-stay was 4.0 days ( $\pm 0.3$  days), ranging from 3 to 21 days.



Abstract LB4 Figure 1

**Conclusions** While more than 60% of our cohort had appropriate regular adjunct analgesia charted, we found an increase in prescribed long-acting opioid from 24% to 50% from 2019 to 2021. To achieve the framework provided by PROSPECT we have initiated a quality improvement project, with a standardised drug prescription kardex, and an extensive education programme for medical and nursing staff on-site.

### LB5 IMPLEMENTING A STANDARDISED TECHNIQUE FOR ADDUCTOR CANAL BLOCKADE FOR UNICOMPARTMENTAL KNEE REPLACEMENT IN A TERTIARY ORTHOPAEDIC CENTRE

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**Background and Aims** The ideal regional anaesthetic technique for unicompartmental knee replacement (UKR) should provide good analgesia without compromising patient ability to mobilise post-operatively. Various approaches to blockade site and volume have been considered.<sup>1</sup> Low volume ACB should avoid motor blockade of medial vastus nerve and inadvertent proximal local anaesthetic spread and quadriceps weakness. In our tertiary orthopaedic centre a standard operating procedure (SOP) was created advising low volume, low concentration adductor canal blockade (ACB) of the saphenous nerve with 10ml 0.2% ropivacaine, alongside effective surgical local infiltration.

**Methods** This ethics-approved prospective audit reviewed records of around 30 consecutive patients undergoing UKR, and assessed whether ACB was performed, dose and volume