Abstract B138 Table 1

Trial	Adjuvant	LA	Surgery	PNB	Primary outcome	Secondary outcomes	Side effects
Kosel 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 = 0.013) 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
YaDeau 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 *Mixture injection:* Buprenorphine (0,15 mg) + clonidine (100 mcg) + dexamethasone (4 mg)	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=0,0,34) 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 handgrip strength in the PACU in low doses' group Time to opioid rescue: NS	None
Sandeep 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 SC 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 groups: S; PONV and itching: NS Quality of sleep in buprenorphine groups: S OBAS: NS	None
Williams et al. 2022	2 cohorts: 2 groups in each cohort; CG: bupivacaine TG: bupivacaine + dexamethasone (1mg) + clonidine (25 mcg) 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 TKA): CG: 16 p TG: 62 p Secondary cohort (THA and TKA): 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 anesthesia care unit; PONV: post-operative nausea and vomiting; OBAS: overall benefit of anesthesia score; S: Significant; SF-MPQ-2: Short Form McGill Pain Questionnaire-v2 (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.

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

B139 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 anesthesia room for the nurses and doctors to fill out after PNBS.The duration of audit was of 1 month from 4th March 2022 to 4th 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.

B140 IMPLEMENTING A STANDARDISED TECHNIQUE FOR ADDUCTOR CANAL BLOCKADE FOR UNICOMPARTMENTAL KNEE REPLACEMENT IN A TERTIARY ORTHOPAEDIC CENTRE

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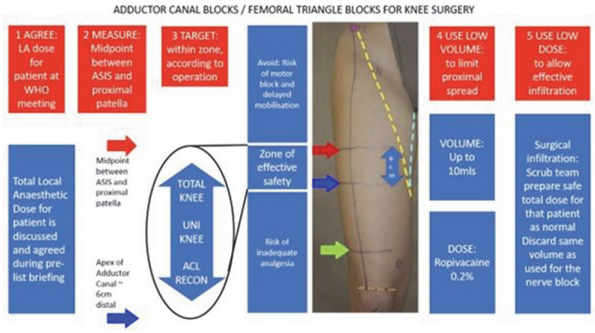
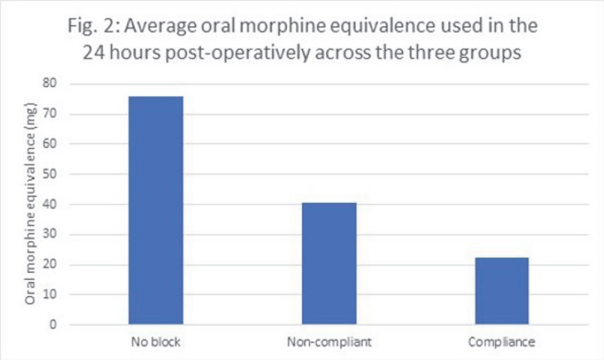
Background and Aims The ideal regional anaesthetic technique for unicompartmental knee replacement (UKR) should provide good analgesia without compromising patient ability to mobilise post-operatively. Various approaches to blockade site and volume have been considered[1]. Low volume ACB should avoid 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 10 ml 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 of local anaesthetic used, and 24-hour post-operative opiate consumption. Two cycles were performed; one pre-SOP introduction, one six months post-introduction. For comparison, data were grouped as 'compliant with recipe,' 'non-compliant' or 'no ACB performed.'



Abstract B140 Figure 1

Results Pre-SOP, a total of 17 different ACB recipes were utilised, with large variations in post-operative opiate consumption. Re-audit showed utilisation of ACB in 70% of cases, and 57% compliance with SOP when ACB was performed. Post-operative opiate consumption decreased when ACB was compliant versus non-compliance, from 40.4mg to 22.5mg oral morphine equivalence. When ACB was not used, opiate consumption was markedly higher at 76mg.



Abstract B140 Figure 2

Conclusions Appropriately sited low volume, low concentration ACB can improve patient experience post-UKR. Introduction of a local SOP in such patients has shown good clinician uptake in addition to reduced post-operative analgesia use. Further targeted clinician education will now aim to improve performance and patient outcomes.

B141 PROCESS IMPROVEMENT FOR AMBULATORY UPPER LIMB SOFT TISSUE TRAUMA SURGERY

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Background and Aims Regional anaesthesia (RA) is ideally suited to upper limb soft tissue trauma surgery (ULSTTS). Compared to general anaesthesia (GA), RA confers several benefits including: better analgesia; less postoperative nausea and vomiting; early independent ambulation; early hospital discharge and high patient satisfaction. The deliberate design of a ULSTTS patient pathway to incorporate RA may confer additional institutional benefits. We developed a RA based ULSTTS pathway and measured the influence on operating theatre time and cost.

Methods Baseline control theatre time data were gathered from theatre records from September and October 2020. Prospective data were collected from April to December 2021. A bottom up cost comparison data analysis for drugs and consumables used was performed. One hundred patients were followed-up by telephone at 24 hours for evaluation of pain (verbal rating score 0–10) and satisfaction (verbal rating score 0–5).

Results From April 2021 to December 2021, we performed 238 ULSTTS surgeries under RA. When compared to matched GA controls, RA patients consumed 26 minutes less total operating theatre time per case. The median per case cost of drugs and consumables for ULSTTS using GA and RA were € 227 and € 20 respectively. The estimated time and cost saving attributable to RA during the study period was calculated as 6188 minutes (103 hours) and € 49,266. At 24 hour followup the median [range] pain and satisfaction scores were 1 [0–5] and 5 [3–5] respectively.

Conclusions RA for ULSTTS is both feasible and effective within a bespoke patient pathway. Significant patient and institutional benefits can be derived

B142 ULTRASOUND-GUIDED ERECTOR SPINAE PLANE BLOCK IN CORONARY ARTERY BYPASS SURGERY: THE ROLE OF LOCAL ANESTHETIC VOLUME – A PROSPECTIVE, RANDOMIZED STUDY

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Background and Aims Although the effectiveness of erector spinae plane block (ESPB) in cardiac surgery has been shown [1], but the optimal volume of ESPB in CABG surgery remains unclear. We hypothesized that using larger volumes of local anesthetic in the ESPB would result in greater dermatomal blockade. The aim of this study is to determine the analgesic efficacy of ESP block with two different volumes in CABG patients.

Methods This prospective,randomized study was conducted in adult patients undergoing CABG surgery with cardiopulmonary bypass. Group-20 received 20 ml of 0.25% bupivacaine perside in ESPB and Group-30, 30 ml of 0.25% bupivacaine perside. Following extubation, tramadol 100mg as rescue analgesia was given to patients of NRS>4. Postoperative sternotomy and chest tube pain was evaluated using the NRS at rest and during coughing after extubation.

Results 70 patients were analyzed. There were significant differences between the groups regarding rescue analgesic was higher in the group 20 ml (25/35vs2/35,$p<0.001$) and the time of the first rescue analgesic requirement. The mean time ±std were 11.26±9.57 hours and 24.03±4.12 hours in the group 20 ml and the group 30 ml,($p<0.001$). The median-(IQR) NRS scores, both at sternotomy and chest tubes, were significantly lower in the group 30 ml at the different time points after the surgery ($p<0.05$).

Conclusions The ESP block performed with a volume of 30 ml, less pain was observed in the sternum and chest tube region, less rescue analgesic requirement, and late first rescue analgesic requirement time. 30 ml can be effective in chest tube and sternum pain in cardiac surgery.

B143 ESP BLOCK AS A PART OF OPIOD FREE ANESTHESIA IN OPEN SPINE FUSION SURGERY CASE SERIES

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10.1136/rapm-2022-ESRA.218

Background and Aims Multimodal analgesia in open spinal fixation surgery allows use of less opiates peroperatively and better patients' outcome [1]. Erector spine block significantly reduces peroperative use of opiates during these operations[2]. Non-opioid anesthesia supplemented with ESP block provides good peroperative analgesia and avoids opioid administration during surgery and postoperatively[3].

Methods We will describe a series of 10 patients planned for open spine fixation on one or more levels.Before induction in anesthesia, each patient received 1.0 g of Paracetamol.The induction to general anesthesia was with 1 mg/kg Lidocaine,