Ropivacaine 0.375% with Dexmedetomidine 30 mcg was performed. No other analgesia was required for the first 24 hours.

Conclusions Peripheral nerve blocks are a valuable tool in the perioperative management of liver disease pediatric patients.

Background and Aims Thoracic outlet syndrome (TOS) is an uncommon compression syndrome of the subclavian vessels or the brachial plexus that presents with pain, motor weakness, swelling, vasoactive and sensory changes in the affected limb. Treatment often requires thoracic outlet decompressive surgery (TODS). We aimed to assess the efficacy of ESP catheters in pediatric patients undergoing TODS over a 12-year period.

Methods After IRB approval, we did a retrospective chart review of pediatric patients (<18 y) who underwent TODS at a tertiary children’s hospital, between Mar 2010 and Feb 2022. We blindly matched regional analgesia group (RAg) patients with no intervention (Cg) historical controls (1:2). We compared baseline patient characteristics (age, weight, ASA-PS, TOS type/laterality, TODS metrics). Outcomes assessed were postoperative recovery criteria (nausea and vomiting (PONV), itching, constipation, time to floor discharge), hospital length of stay (LoS), pain scores in the first hours, and total oral morphine equivalent (OME) use in the first two days.

Results There were no significant demographic or TODS differences between the groups (Table 1). Blocks took 17.9±7.6 min to complete. Pain scores were decreased in the RAg patients 3–24h postoperatively. Opioid analgesia administered to the RAg in 24h were less than a third than the Cg (Table 2). Non-Opioid analgesia didn’t change (Figure 1). PONV (and possibly pruritus) in the Cg were more prevalent in the first 48h compared to the RAg (p=0.006, Table 2).

Conclusions Regional analgesia continuous ESP catheters for TODS decreased pain, OME analgesic use, and some opiate adverse effects in a pediatric historical cohort.
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’.

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.

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

**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 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 for lower 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.