

Abstracts

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 paediatric patients.

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**REGIONAL ANALGESIA VIA CONTINUOUS ERECTOR SPINAEPANE (ESP) CATHETERS FOR THORACIC OUTLET DECOMPRESSION SURGERY IN CHILDREN – A RETROSPECTIVE CASE SERIES**

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**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<sup>1,2</sup>. Treatment often requires thoracic outlet decompressive surgery (TODS). We aimed to assess the efficacy of ESP catheters<sup>3,4,5</sup> 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)<sup>5</sup>. 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<sup>3,4,5</sup>.

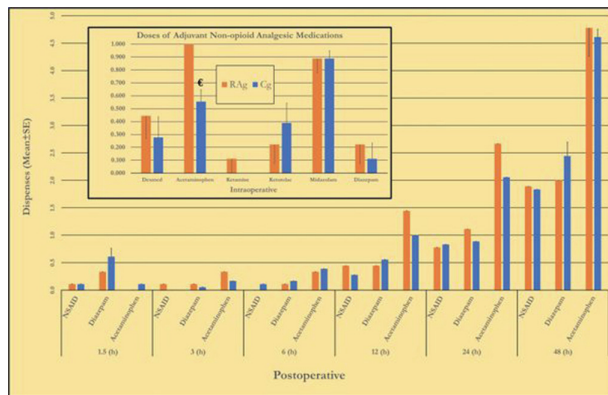
**Results** There were no significant demographic or TODS differences between the groups (Table 1). Blocks took 17.9±7.6 min to complete. Pain scores were decreased in the RAG patients 3–24h postoperatively. Opioid analgesia administered to the RAG in 24h were less than a third than the Cg (Table 2). 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).

Abstract B442 Table 1

Table 1. Demographic and Operative Data. Comparison of Regional Analgesia group (RAG, n=18) and Matched Historical Control group (CG, n=36). Metrics include Age (mean), ASA-PS, Operative Time, Length of Stay, and various postoperative outcomes like PONV, itching, constipation, and analgesic use.

Abstract B442 Table 2

Table 2. Postoperative Results. Comparison of Regional Analgesia group (RAG, n=18) and Matched Historical Control group (CG, n=36). Metrics include Pain scores, PONV, Itching, Constipation, Time to Floor Discharge, Hospital Length of Stay, and Analgesic Use (Morphine and NSAIDs).



Abstract B442 Figure 1

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

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**IMPROVING THE SAFETY OF REGIONAL ANAESTHESIA LOCALLY IN PAEDIATRIC PATIENTS**

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**Background and Aims** Regional anaesthetic (RA) techniques provide high quality paediatric post-operative analgesia.<sup>1</sup> Unfortunately, wrong sided block (WSB) incidence remains unacceptable at 1 in 6250.<sup>2</sup> Potential adverse consequences include patient distress and wrong-side surgery. NHS England classify this as a 'Never Event' and have worked with the Safe Anaesthesia Liaison Group (SALG) to implement the 'STOP Before You Block' (SBYB) initiative to eradicate WSB. Additionally, the National Patient Safety Agency (NPSA) have created clear standards for surgical site marking (SSM)<sup>3</sup>. Following an incidence of WSB, we sought to improve departmental RA safety with the following aims through evaluation of the SBYB process and SSM standards.

**Methods** We undertook two snapshot questionnaires. Firstly, we explored anaesthetic SBYB application over 1-week. Secondly, we audited the NPSA SSM criteria over 3-weeks. This two-step process evaluated current RA safety mechanisms.