Abstract EP235

Ultrasound guided needle placement

Conclusions PNS is an effective and safe option for the treatment of chronic pain, and we present a report of successful treatment of PHN in a particularly difficult anatomic distribution. PNS of the lesser occipital and greater auricular nerves is a novel treatment for PHN and shows promise as an effective, safe therapy when other treatment fails.

Abstract EP236

EFFECTIVENESS OF REGIONAL ANESTHESIA IN THE PERIOPERATIVE MANAGEMENT OF GENDER-AFFIRMING SURGERIES: A SYSTEMATIC REVIEW

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Background and Aims Transition-related surgery (TRS) is an effective treatment for gender dysphoria, but the perioperative analgesic management of transgender patients may be complicated by higher rates of mood and substance use disorders. Regional anesthesia techniques reduce pain severity and opioid requirements, thereby improving postoperative recovery. However, little is known regarding the effectiveness of regional anesthesia techniques for transgender patients undergoing TRS.

Methods A literature search was performed using Medline, Embase, Cochrane, and CINAHL databases. Original studies describing regional anesthesia approaches for patients undergoing TRS were included. The primary outcomes were pain scores and opioid requirements on the first postoperative day (POD1). Due to the heterogeneity of interventions and outcomes, findings underwent qualitative synthesis without meta-analysis.

Results Of 1652 studies identified, eight met criteria for inclusion. Three studies described chest surgery, comprising 201 patients of whom 84% were transgender men undergoing mastectomy with pectoralis blocks or local instillation anesthetic devices. The remaining five studies described genital surgery, comprising 50 patients of whom 56% were transgender women undergoing vaginoplasty with lumbosacral erector spinae plane blocks or epidural anesthetics. Overall, the eight studies broadly ascribed benefits to nerve blocks. Few studies directly compared regional and non-regional anesthesia; however, these studies unanimously reported lower pain scores and opioid requirements on POD1 with nerve blocks compared to none. Furthermore, anesthetic complications were rare among included studies.

Conclusions Regional anesthesia for TRS is understudied, which may be attributable to pervasive marginalization of transgender individuals. However, the limited existing literature does support regional anesthesia techniques as an effective option for TRS.

Abstract EP237

DOES ERECTOR SPINAE PLANE BLOCK IMPROVE RESPIRATORY OUTCOMES IN ADULTS WITH RIB FRACTURES?

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Background and Aims The incidence of rib fractures has increased by 43.7% from 1990 to 4.11 million in 2019. Hypoventilation due to pain and damaged lung tissue as a result of rib fractures leads to respiratory complications such as pneumonia which is associated with increased mortality. The aims of this review are to compare to other regional anaesthetic techniques
and draw conclusions from the data on the effectiveness of the ESPB at reducing respiratory complications.

**Methods** A literature search was conducted using PubMed and Scopus databases. The search yielded 433 results with 45 duplicates. The titles and abstracts of 388 records were screened for relevance, leaving 52 records. Application of the inclusion and exclusion criteria resulted in 8 studies to be included. A ‘snowball’ search was carried out which yielded no relevant papers.

**Results** 4 studies reported a significant reduction in pain and OME with ESPB compared to baseline however, only 1 study reported a significant difference between ESPB and the comparative analgesia (SAB). No significant difference was found for respiratory complications between ESPB and SAB or opioid analgesia however there was a significant increase in complications when ESPB was given after 48hrs compared to before. Similarly, diaphragmatic activity improved significantly with ESPB compared to SAB. Finally, there was no significant reduction in hospital or ICU length of stay.

**Conclusions** Despite appearing to be safe and giving significant improvements in pain and OME consumption, the links between ESPB and directly improved respiratory outcomes are tenuous. This demonstrates the need for further robust clinical trials with suitable outcomes.

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Figure 1 Poster presentation of review

**Abstract EP238**

**A COMPARISON OF CONTINUOUS SUPRACLAVICULAR BRACHIAL PLEXUS BLOCK USING THE PROXIMAL LONGITUDINAL OBLIQUE APPROACH, AND INTERSCALENE BRACHIAL PLEXUS BLOCK FOR ARTHROSCOPIC SHOULDER SURGERY**

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**Background and Aims** Continuous interscalene brachial plexus block (ISB) provides superior analgesic benefits in major shoulder surgery but has a high risk of hemidiaphragmatic paresis (HDP). Using proximal longitudinal oblique (PLO) approach, catheter can be placed without interfering with surgical site, and the local anesthetic can be injected more distally. We expected supraclavicular brachial plexus block using PLO approach (PLO-SCB) would provide equivalent analgesia compared with ISB while sparing the phrenic nerve.

**Methods** Patients were randomly allocated to receive continuous PLO-SCB (n = 40) or continuous ISB (n = 40) after low-volume single-shot injection. The primary outcomes were HDP incidence and worst pain scores. Secondary outcomes included respiratory function, postoperative analgesic consumption, sensory and motor function, and complications. This study was approved by the Institutional Review Board of Asan Medical Center.

**Conclusions** Continuous variables are expressed as median (IQR); Categorical variables are expressed as number (%). NBPCA, nerve block patient-controlled analgesia; ISB, interscalene brachial plexus block; PLO-SCB, proximal longitudinal oblique approach-supraclavicular brachial plexus block; NRS, numerical rating scale.