**EP036** COMPARISON OF EFFICACY OF ULTRASOUND GUIDED LUMBAR ERECTOR SPINAES BLOCK WITH ULTRASOUND GUIDED THORACOLUMBAR INTERFASCIAL PLANE BLOCK FOR POSTOPERATIVE ANALGESIA IN LUMBAR DISCECTOMY SURgeries

Amrita Rath*. Anesthesiology, Institute of Medical Sciences, BHU, Varanasi, India

10.1136/rapm-2023-ESRA.98

**Background and Aims** Lumbar discectomy is commonly performed for prolapsed intervertebral disc and degenerative spine. The erector spinae block is paravertebral by proxy fascial plane block whereas, the thoracolumbar interfacial plain block is a paraspinal plane block. We aimed to compare the efficacy of ultrasound-guided – Erector spinae block Vs thoracolumbar interfascial plane block for postoperative analgesia in lumbar discectomy surgeries.

**Methods** After obtaining institute ethical committee clearance and written informed consent, 60 patients were randomly allocated into 2 groups- Group E (bilateral lumbar ESP block) and Group T (bilateral TLIP block) received 40 ml of 0.2% ropivacaine and 1mcg/kg of dexmedetomidine after general anaesthesia. The primary objective was to compare VAS at rest and at activity at 30 mins, 1, 6, 12 and 24 hours postoperatively. The secondary outcome of the study was to compare the time to the first dose of rescue analgesia and the number of times rescue analgesia was needed.

**Results** The VAS score at activity was significantly lowered at all times in group E as compared to group T.(p<0.001) At rest, group E had lower VAS at all durations except at 1st hour. The time to 1st analgesic requirement and number of times rescue analgesia was needed was significantly lowered in group E than in group T.(P<0.001)

**Conclusions** Ultrasound-guided erector spinae block is a better technique as compared to ultrasound-guided thoracolumbar interfascial block for post-operative analgesia in lumbar discectomy surgeries.

---

**ePoster session 2 – Station 1**

**EP037** DEVELOPMENT OF AN AUTOMATED REGISTRY IN THE ELECTRONIC HEALTH RECORD TO TRACK PATIENTS MANAGED BY THE PEROPIOPERATIVE PAIN SERVICE: A RESEARCH AND QUALITY IMPROVEMENT TOOL

1, 2, 3Alexandra Sideris*, 1William Chan, 1Mary Kelly, 1Samuel Schuessler, 1Patrick Fritz, 1POPS Steering committee, 1,2Spencer Liu, 1Faye Rim. 1Department of Anesthesiology, Critical Care and Pain Management, Hospital for Special Surgery, New York, USA; 2Department of Anesthesiology, Weill Cornell Medicine, New York, USA; 3HSS Research Institute, Hospital for Special Surgery, New York, USA; 4HSS Enterprise Analytics Team, Hospital for Special Surgery, New York, USA

10.1136/rapm-2023-ESRA.99

**Background and Aims** The Perioperative Pain Service (POPS) at Hospital for Special Surgery (HSS) is a multidisciplinary team specializing in the management of acute, chronic, and complex pain in orthopedic surgical patients. The aims of this project were to create an automated registry embedded in the electronic health record that captures surgical cases with any POPS encounter and stores patient metrics over time (figure 1). Case characteristics saved daily within the database include patient demographics, pain intensity, and surgery details, with more metrics being programmed and validated.

**Results** Between January 2022 through April 2023, 6,475 scheduled surgical cases met registry criteria (figure 2). Out of these cases, 1,183 (18%) had a preoperative pain consultation, 4,561 (70%) involved the acute pain service, 1,580 (24%) involved the chronic pain service, and 31 (0.46%) required a post-discharge pain consultation. Patient-controlled analgesia was utilized in 5,668 (88%) cases of which 3,810 (60%) received only intravenous opioid and <1% received a perineural catheter.

**Conclusions** As the first encounter-based, analytical registry at HSS, the POPS registry represents a proof-of-concept, auto-updating data repository designed for an inpatient pain management specialty service. Research and quality improvement projects leveraging this registry may elucidate improvements in the preoperative pain screening referral workflow and identify modifiable risk factors and multimodal strategies to mitigate severe acute pain, opioid consumption, and resource utilization in complex pain patients.
Abstracts

Abstract EP039 Figure 1  During local anesthetic administration to the paravertebral space, TP: Transverse Process, ESM: Erector Spinae Muscle

Background and Aims Preoperative rehabilitation in femoral-neck fracture patients has been shown to improve postoperative outcomes but it can be challenging due to intolerable pain. The pericapsular nerve group (PENG) block has been utilized for postoperative pain control for femoral-neck fracture repair with motor-sparing features. This study seeks to assess the efficacy of PENG block in preoperative rehabilitation for femoral-neck fracture patients.

Methods Ten patients with Garden classification 3-4 femoral-neck fractures scheduled for total hip arthroplasty, were prospectively enrolled from April-July 2022 at Kameda Medical Center, Japan (PENG group). These patients received PENG block with 20 ml of 0.375% ropivacaine before the initial preoperative rehabilitation. The rehabilitation program included nine mobility levels of bed-sitting, edge-sitting, standing, wheelchair-transfer, marching, with two or one staff, and walking with or without a device. Data from twenty-six patients with the same eligibility who received the same rehabilitation program with standard pain management from April 2021 to March 2022 were collected as a control group. The primary outcome was the cumulative outcome of the rehabilitation program. The secondary outcomes included the numerical rating scale (NRS) score and home-discharge rate. No adverse events related to PENG block were observed.

Conclusions PENG block may facilitate preoperative rehabilitation in femoral-neck fracture patients.

Abstract EP038 THE EFFICACY OF PERICAPSULAR NERVE GROUP (PENG) BLOCK IN PREOPERATIVE REHABILITATION FOR PATIENTS WITH FEMORAL-NECK FRACTURES: A PILOT STUDY

1Department of Anesthesiology, Kameda Medical Center, Kamogawa, Japan; 2Department of Anesthesiology and Resuscitology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan; 3Department of Rehabilitation, Kameda Medical Center, Kamogawa, Japan

Background and Aims Preoperative rehabilitation in femoral-neck fracture patients has been shown to improve postoperative outcomes but it can be challenging due to intolerable pain. The pericapsular nerve group (PENG) block has been utilized for postoperative pain control for femoral-neck fracture repair with motor-sparing features. This study seeks to assess the efficacy of PENG block in preoperative rehabilitation for femoral-neck fracture patients.

Methods Ten patients with Garden classification 3-4 femoral-neck fractures scheduled for total hip arthroplasty, were prospectively enrolled from April-July 2022 at Kameda Medical Center, Japan (PENG group). These patients received PENG block with 20 ml of 0.375% ropivacaine before the initial preoperative rehabilitation. The rehabilitation program included nine mobility levels of bed-sitting, edge-sitting, standing, wheelchair-transfer, marching, with two or one staff, and walking with or without a device. Data from twenty-six patients with the same eligibility who received the same rehabilitation program with standard pain management from April 2021 to March 2022 were collected as a control group. The primary outcome was the cumulative outcome of the rehabilitation program. The secondary outcomes included the numerical rating scale (NRS) score and home-discharge rate.

Results One patient in the PENG group could not perform rehabilitation due to high blood pressure. The primary outcome achievement was significantly greater in the PENG group (44.4% vs. 8.5%; odds ratio: 8.5, 95% CI: 4.3-17.0; p<0.0001). The PENG group also had a significantly lower NRS score and a higher home-discharge rate. No adverse events related to PENG block were observed.

Conclusions PENG block may facilitate preoperative rehabilitation in femoral-neck fracture patients.

Abstract EP037 Figure 3  Registry patient demographics and case characteristics

EP038 THE EFFICACY OF PERICAPSULAR NERVE GROUP (PENG) BLOCK IN PREOPERATIVE REHABILITATION FOR PATIENTS WITH FEMORAL-NECK FRACTURES: A PILOT STUDY

1Department of Anesthesiology, Kameda Medical Center, Kamogawa, Japan; 2Department of Anesthesiology and Resuscitology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan; 3Department of Rehabilitation, Kameda Medical Center, Kamogawa, Japan

Background and Aims Preoperative rehabilitation in femoral-neck fracture patients has been shown to improve postoperative outcomes but it can be challenging due to intolerable pain. The pericapsular nerve group (PENG) block has been utilized for postoperative pain control for femoral-neck fracture repair with motor-sparing features. This study seeks to assess the efficacy of PENG block in preoperative rehabilitation for femoral-neck fracture patients.

Methods Ten patients with Garden classification 3-4 femoral-neck fractures scheduled for total hip arthroplasty, were prospectively enrolled from April-July 2022 at Kameda Medical Center, Japan (PENG group). These patients received PENG block with 20 ml of 0.375% ropivacaine before the initial preoperative rehabilitation. The rehabilitation program included nine mobility levels of bed-sitting, edge-sitting, standing, wheelchair-transfer, marching, with two or one staff, and walking with or without a device. Data from twenty-six patients with the same eligibility who received the same rehabilitation program with standard pain management from April 2021 to March 2022 were collected as a control group. The primary outcome was the cumulative outcome of the rehabilitation program. The secondary outcomes included the numerical rating scale (NRS) score and home-discharge rate. No adverse events related to PENG block were observed.

Conclusions PENG block may facilitate preoperative rehabilitation in femoral-neck fracture patients.

EP039 PARAVERTEBRAL AND QUADRATUS LUMBOURUM BLOCK III IN A PULMONARY RISK PATIENT UNDERGOING LAPAROSCOPIC CHOLECYSTECTOMY: A CASE REPORT

Serpil Sehirlioglu*
Anaesthesia and reanimation, Istanbul Health Sciences University, Gaziosmanpaşa Training and Research Hospital, Istanbul, Turkey

Background and Aims General anesthesia is commonly preferred in laparoscopic cholecystectomies (LC). However, different anesthesia approaches can be applied in high-risk patients. In this study, we aimed to present a case of a pulmonary high-risk patient who underwent LC with paravertebral block and Quadratus Lumbarum-III block (QLB).

Methods The 62-year-old male patient had a history of hypertension, COPD, and previous tuberculosis. The patient’s test results revealed FEV1 of 49%, FEV1/FVC ratio of 68%. The patient had dyspnea, and computed tomography showed destructive, fibrotic changes and pleural thickening in the lungs. Due to high pulmonary risk, regional anesthesia was planned for this patient. Bilateral paravertebral block (figure 1) and bilateral QLB-III (figure 2) were applied for 30 minutes before the operation at the thoracic 8 level. The patient, who had T4-T12 dermatome involvement, was sedated with 2 mg midazolam and 50 mcg fentanyl, and then taken to the operation room (figure 3). The patient’s Richmond Agitation Sedation Scale remained at -1 during the operation.