**Abstract EP176 Table 1** Comparison of control, ESP, and PIF treatment groups across baseline and outcome variables

<table>
<thead>
<tr>
<th>Baseline Variables</th>
<th>Control (N=30)</th>
<th>ESP (N=30)</th>
<th>PIF (N=30)</th>
<th>p-value</th>
<th>Total (N=90)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mean)</td>
<td>63.8 (SD 5.3)</td>
<td>63.5 (SD 2.2)</td>
<td>64.9 (SD 5.6)</td>
<td>0.584</td>
<td>64.2 (SD 5.9)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>22 (73.3%)</td>
<td>9 (30.0%)</td>
<td>10 (33.3%)</td>
<td>0.170</td>
<td>22 (73.3%)</td>
</tr>
<tr>
<td>IME (mean)</td>
<td>26.1 (5.0)</td>
<td>25.7 (5.1)</td>
<td>29.4 (4.7)</td>
<td>0.673</td>
<td>28.3 (5.3)</td>
</tr>
<tr>
<td>Tobacco Use</td>
<td>8 (26.7%)</td>
<td>8 (26.7%)</td>
<td>4 (13.3%)</td>
<td>0.220</td>
<td>16 (53.3%)</td>
</tr>
<tr>
<td>Alcohol Use</td>
<td>1 (3.3%)</td>
<td>1 (3.3%)</td>
<td>2 (6.7%)</td>
<td>0.220</td>
<td>4 (13.3%)</td>
</tr>
<tr>
<td>Recreational Drug Use</td>
<td>2 (6.7%)</td>
<td>2 (6.7%)</td>
<td>1 (3.3%)</td>
<td>0.220</td>
<td>5 (16.7%)</td>
</tr>
<tr>
<td>Drowsiness</td>
<td>24 (80.0%)</td>
<td>21 (70.0%)</td>
<td>22 (73.3%)</td>
<td>0.945</td>
<td>67 (74.4%)</td>
</tr>
<tr>
<td>Hypersomnia</td>
<td>25 (83.3%)</td>
<td>26 (86.7%)</td>
<td>25 (83.3%)</td>
<td>1.000</td>
<td>76 (84.4%)</td>
</tr>
<tr>
<td>Diuresis</td>
<td>14 (46.7%)</td>
<td>12 (40.0%)</td>
<td>7 (23.3%)</td>
<td>0.276</td>
<td>33 (36.7%)</td>
</tr>
<tr>
<td>Anemia</td>
<td>16 (53.3%)</td>
<td>18 (60.0%)</td>
<td>13 (43.3%)</td>
<td>0.530</td>
<td>47 (52.2%)</td>
</tr>
</tbody>
</table>

**Conclusions** These results indicate that the administration of ESP or PIF block for sternotomy does not modulate opioid use throughout the average ICU LOS duration for these patients, as compared to the control however may contribute to improved patient experience as indicated by lower pain scores.

**Background and Aims** Chronic residual pain after total knee arthroplasty (TKA) is one of the challenges of postoperative pain management. Duloxetine in controlling neuropathic pain and pregabalin by affecting nociceptors can be effective in postoperative pain management. The aim of this study is to compare the effect of perioperative oral duloxetine and pregabalin in pain management after knee arthroplasty.

**Methods** In this clinical trial, 90 patients scheduled for TKA under spinal anesthesia were randomly assigned to one of three groups A (Pregabalin 75 mg), B (Duloxetine 30 mg), and C (Placebo). Drugs were administered 90 minutes before, 12 and 24 hours after surgery. Visual analog pain score (VAS), the first analgesic request time, postoperative analgesic consumption (i.v. paracetamol), and WOMAC score six months after surgery were recorded.

**Results** VAS score and analgesic consumption 48 hours after TKA in groups A and B had a significant decrease compared to placebo (p<0.05). The first analgesic request time in groups A and B was longer than the group C (p<0.05). Of note, while the differences were statistically significant, they are most likely not clinically significant. The WOMAC score before and 6 months after the arthroplasty did not differ between the groups (p>0.05).

**Conclusions** Perioperative oral pregabalin and duloxetine similarly reduces pain and the need for analgesic consumption within 48 hours after TKA, but has no effect on knee mobility status.

**EP177 COMPARISON OF PERIOPERATIVE PREGABALIN AND DULOXETINE ON PAIN AFTER TOTAL KNEE ARTHROPLASTY**

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**EP178 COMBINED SPINAL EPIDURAL ANESTHESIA WITH HYPERVOLEMIC HEMODILUTION TECHNIQUE SHOWED GOOD FETOMATERNAL OUTCOMES IN PLACENTA ACCRETA SPECTRUM PATIENTS WHO UNDERWENT ELECTIVE SECTIO CESAREAN SURGERY: A CASE SERIES**

Emilia Tiara Shantikaratri*, Isngadi Isngadi, Ruddi Hartono. Anesthesiology and Intensive Care Therapy, RSUD Dr. Saiful Anwar Malang, Malang, Indonesia

**Background and Aims** Placenta accreta (PA) remains as one of the leading causes of peripartum hemorrhage. Regional anesthesia and hypervolemic hemodilution techniques remain controversial in the PA case. We aim to describe the use of combined spinal epidural (CSE) anesthesia with hypervolemic hemodilution technique and fetomaternal outcomes in our patients.

**Methods** We present four cases of parturient with a median age of 32 years old, who have a history of section cesarean surgery and are suspected of placenta accreta in their current pregnancy.

**Results** Physical examination and laboratory results show no abnormalities in all patients. The probability of PA using placenta accreta index (PAI) was about 19-69%. Two large 18G calibers of intravenous line and arterial line were inserted, then hypervolemic hemodilution calculated using formula: Estimated Blood Volume (EBV) × (Initial hematocrit (HO) - targeted hematocrit (Hf))/Hf given around 1,5-2,5 liters of fluid before we conducted CSE anesthesia. The placenta accreta was documented and hysterectomy was done in all patients. Intra-operative hypotension was quickly resolved with fluid loading and vasopressor drugs. The bleeding was around 2-4 liters replaced by 0% red pack cell transfusion. Post-operative hematocrit level was 28-30%. The APGAR score was good in all the...
babies. The patients are then transferred to the intensive care unit (ICU) in a stable condition without vasopressor drugs. We used epidural analgesia for post-operative pain management. They were moved to a regular ward after 24 hours of monitoring with uneventful adverse effects.

Conclusions

CSE anesthesia with hypervolemic hemodilution technique showed good fetomaternal outcomes with uneventful adverse effects, acceptable post-operative hematocrit level and excellent post-operative pain management in our patients.

### EP179

**MODIFICATION OF SPHENOPALATINE GANGLION BLOCK FOR TREATMENT OF POSTURAL PUNCTURE HEADACHE: A CASE SERIES**

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Background and Aims The search for more straightforward to treat PDPH has led to regional blocks like sphenopalatine ganglion block (SPGB) and greater occipital nerve block and trigger point infiltration. We have evaluated the efficacy of MSGB in treating PDPH. This is an ongoing study, and we are presenting preliminary data of our study in 13 patients as case series.

Methods Patients with typical symptoms of PDPH are recruited in this study. Pain score was assessed before the procedure using NRS (0 – no pain to 10 – worst pain imaginable) in the static and dynamic state. 2 ml of solution (1ml of 2% lignocaine + 1ml of 0.5% ropivacaine or normal saline) was slowly instilled along the superior edge of the middle concha to the posterior wall of the nasopharynx with the help of a dropper in each nostril alternatively as modified sphenopalatine ganglion block (MSPGB). After 5 min, the patients were asked to lift their head gradually and be asked to report their pain as per NRS. Subsequently, NRS will be assessed at 2, 4, 8, 12, 16, 24-, 36-, 48- and 72 hours post block. The MSGB was repeated if the patient reported NRS > 4.

Results 13 patients have been given MSPGB, and the median NRS score Pre MSPGB block was 8 but post-MSPGB, median score was reduced to 3, 2, 3, 4, 5, 4, 2, 5, 2, 2 and 1 at 2, 4, 8, 12, 16, 24, 36, 48 and 72 hours post block. The MSGB was repeated if the patient reported NRS > 4.

Conclusions MSGB is a simple & noninvasive method of treating PDPH along with minimal side effects in postoperative care settings.

### EP180

**CONTINUOUS DEEP SERRATUS ANTERIOR PLANE BLOCK FOR STERNOTOMY ANALGESIA FOLLOWING CARDIAC SURGERY: A RANDOMIZED, PLACEBO-CONTROLLED, DOUBLE-BLINDED FEASIBILITY STUDY**

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Background and Aims Moderate to severe pain is common after cardiac surgery, peaking during the first and second postoperative day. Several nerve blocks for sternotomy have been described, however the optimal location for continuous catheters has not been established. This study sought to assess the feasibility of a larger trial assessing the efficacy of serratus anterior plane (SAP) catheters for sternotomy pain.

Methods This was a double-blinded trial including patients undergoing cardiac surgery via sternotomy. Bilateral SAP catheters were placed in all patients, randomized to ropivacaine or placebo. Feasibility was assessed based on pre-determined endpoints: 1. Average recruitment rate >4 per month; 2. Protocol adherence rate >90%; 3. Primary outcome measurement rate >90%; 4. Major catheter-related adverse event rate >2%. Quality of recovery index (QoL-15) was compared using an independent t-test.

Results Fifty-two patients were randomized with feasibility data for 50 (2 were withdrawn). There was a poor recruitment rate (2.4 patients per month). There were no major protocol deviations but there were minor deviations in 12% of patients. The primary outcome (QoL-15) was measured in 96% cases. QoL-15 at 72 hours was not different between groups (Ropivacaine 100 +/- 22 vs Placebo 97 +/- 18, p=0.63). The overall incidence of pneumothorax was found to be 12%.

Conclusions A single-center RCT was deemed to be not feasible due to low recruitment rate. It was unclear if the