**Abstract EP196**

**CHRONIC/COMPLEX PAIN SERVICE UTILIZATION IN AN ORTHOPEDIC SPECIALTY HOSPITAL**

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**Background and Aims**
The Perioperative Pain Service (POPS) at Hospital for Special Surgery (HSS) is a multidisciplinary team that manages acute and complex pain in orthopedic surgical patients. Under POPS, the chronic/complex pain service (CPS) team has a structured approach to preoperatively identify patients with chronic opioid use, substance use disorder or other complex pain issues, and tailors perioperative pain management plans to optimize outcomes. The aim of this study was to identify overall CPS utilization and case characteristics in a single, high-volume orthopedic specialty hospital.

**Methods**
After IRB approval for a prospective, standard of care POPS registry, surgical cases requiring a CPS consult during hospitalization for orthopedic surgical procedures between January 2022 and May 2023 were identified and service metrics extracted.

**Results**
Overall, 1,048 (61%) had an in-person, preoperative pain consultation. Patient-controlled analgesia was administered in 73% of cases; perineural catheters were placed in 23 cases (2%), of which 15 (65%) were after a total knee replacement. Post-discharge POPS consults were required in 1% of CPS cases.

**Conclusions**
CPS manages patients’ post-surgical pain through a multi-pronged approach. While most patients were appropriately identified preoperatively and referred to CPS by the surgical team, there is room for improvement. The low percentage of post-discharge POPS follow-ups reflects appropriate discharge planning with the patients’ surgical, pain and primary care providers.

Rim .2021-1899_POPS_registry_CR1_approved_12.21.2022

**Abstract EP197**

**IMPACT OF OBESITY ON CLINICALLY SIGNIFICANT RESPIRATORY EVENTS FOLLOWING CESAREAN DELIVERY: IS A 24-HOUR HIGH ACUITY SETTING NECESSARY FOR PATIENTS WITH BMI >50 KG/M2**

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**Background and Aims**
Pregnant people with obesity class 3 are thought to be at higher risk of adverse respiratory-events. There is little information in the literature on the incidence and severity of obesity-related postpartum respiratory depression. Our institution’s current standard of practice is to consider maintaining patients with BMI>50 who have received long-acting neuraxial opioids following cesarean delivery (CD) in the Labour and Delivery Unit for respiratory monitoring. This represents a significant workload for the system. This study aimed to determine the incidence of respiratory complications in this subset of patients.

**Methods**
We reviewed medical records of patients with BMI>40 who underwent CD and received long-acting neuraxial opioids between January 2015- December 2022. Patients were divided into three groups according to their BMI: 40-49, 50-59, and >60. Clinically significant respiratory-events (see the definition in table 1) within the first 24 hours post-CD were compared.

**Results**
Demographics, patient characteristics, comorbidities, and respiratory events are presented in table 1. No severe respiratory events were observed in any of the groups from 497 patients (figure 1). Three moderate respiratory-events were observed, one in each group. Thirteen, 9 and 5 mild respiratory-events were observed in BMI 40-49, 50-59, and >60 groups, respectively.

**Abstract EP197 Table 1**

<table>
<thead>
<tr>
<th>BMI 40-49</th>
<th>BMI 50-59</th>
<th>BMI &gt;60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years), mean (SD)</td>
<td>33.8 (4.4)</td>
<td>34.2 (4.8)</td>
</tr>
<tr>
<td>Weight (kg), mean (SD)</td>
<td>154.4 (13.3)</td>
<td>147.2 (15.1)</td>
</tr>
<tr>
<td>Height (cm), mean (SD)</td>
<td>162.9 (7.9)</td>
<td>164.9 (7.6)</td>
</tr>
<tr>
<td>BMI (kg/m²), mean (SD)</td>
<td>43.0 (2.7)</td>
<td>54.0 (2.8)</td>
</tr>
</tbody>
</table>

**Medical Comorbidities**

<table>
<thead>
<tr>
<th>N (%)</th>
<th>N (%)</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension (HTN)</td>
<td>92 (25.7)</td>
<td>30 (26.1)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>122 (33.1)</td>
<td>34 (29.1)</td>
</tr>
<tr>
<td>Obstructive Sleep Apnea (OSA)</td>
<td>104 (28.3)</td>
<td>43 (37.3)</td>
</tr>
<tr>
<td>Asthma</td>
<td>52 (14.5)</td>
<td>23 (20.0)</td>
</tr>
</tbody>
</table>

**Postoperative Respiratory Events**

<table>
<thead>
<tr>
<th>BMI 40-49</th>
<th>BMI 50-59</th>
<th>BMI &gt;60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen LBO (Stay)</td>
<td>2 (0.5%)</td>
<td>16 (13.9%)</td>
</tr>
</tbody>
</table>

**Severe Respiratory Event n (%)**

<table>
<thead>
<tr>
<th>BMI 40-49</th>
<th>BMI 50-59</th>
<th>BMI &gt;60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate Respiratory Event n (%)</td>
<td>10 (3.3%)</td>
<td>1 (0.5%)</td>
</tr>
</tbody>
</table>

**Respiratory Event n (%)**

<table>
<thead>
<tr>
<th>BMI 40-49</th>
<th>BMI 50-59</th>
<th>BMI &gt;60</th>
</tr>
</thead>
<tbody>
<tr>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
</tr>
<tr>
<td>No Respiratory Event</td>
<td>341 (99.5%)</td>
<td>105 (91.3%)</td>
</tr>
</tbody>
</table>

**Definition of the respiratory events**

- (1) SPO2 < 85% lasting < 30 sec.
- (2) Opioid antagonist administration
- (3) Anesthesiologist involvement due to respiratory event
- (4) Respiratory support with CPAP/BiPAP, bag-mask ventilation, laryngeal mask insertion, or tracheal intubation.
- (5) Code Blue®
- (6) Intensive II nurse care requirement

* SPO2 < 90% lasting < 30 sec or need for respiratory support with nasal cannula or oxygen mask
** SPO2 < 95% lasting < 30 sec or need for respiratory support with nasal cannula or oxygen mask
*** One patient had SPO2 between 85-90%, needed opioid antagonist injection
Abstract EP197 Figure 1  Comparison of the respiratory events (%) per study groups

Conclusions Our results suggest that there is no association between BMI and severe respiratory-events after CD under neuraxial anesthesia and the use of long-acting neuraxial opioids. Extended admission to a high-acuity setting may not be necessary for the majority of these patients. In addition to BMI, the presence of patient comorbidities and physician assessment may prove valuable in determining the necessity for admission.

Initial Ethics Commmity Approval Letter 22-0202-C

Abstract EP198 Figure 1  Committee ethics file

Conclusions The adductor canal block provides better control of analgesia, with more satisfied patients compared to the PAI alone group.

Abstracts

EP198  COMPARISON ADDUCTOR CANAL BLOCK COMBINED WITH PERIARTICULAR INFILTRATION AND PERIARTICULAR INFILTRATION ALONE AFTER TOTAL KNEE ARTHROPLASTY FOR PAIN CONTROL AND PATIENT SATISFACTION: A PROSPECTIVE OBSERVATIONAL CASE STUDY

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10.1136/rapm-2023-ESRA.259

Background and Aims Periarticular infiltration (PAI) and adductor canal block (ACB) have become popular modes of pain management after total knee arthroplasty. The purpose of our study is to evaluate the efficacy of ACB combined with PAI in comparison with PAI alone for pain control and patient satisfaction in patients undergoing primary total knee arthroplasty.

Methods This study is a prospective observational study that is conducted at a single university hospital in Belgium. Thirty-six patients operated on for primary knee arthroplasty in the enhanced recovery pathway were included. Patients who received the ACB combined with PAI (n=18) were compared with those who received the PAI alone (n=18). The primary outcome is visual analog scale score (VAS) at recovery room to patient mobilization at 24 hours after surgery, whereas the secondary outcomes include satisfaction, opioid consumption, length of hospital stay and complications. The study is approved by the Ethics committee of CHU Charleroi, Belgium (CCB: B325201942327, on 27/11/2019).

Results In the ACB+PAI, the VAS are better than the group of PAI alone at 12 hours after surgery and at mobilization (24 hours after surgery) (p-value=0.011; 0.001). The morphine consumption is clearly reduced during this period in the group ACB+PAI (p-value=0.006; 0.009). Patient satisfaction is also better when BCA is added (p-value=0.008). The length of hospital stay is less long in the ACB+PAI group (p-value=0.007). No significant difference in complications.

EP199  IDENTIFICATION OF INTERFASCIAL PLANE USING INJECTION PRESSURE MONITORING AT THE NEEDLE TIP DURING ULTRASOUND GUIDED TAP BLOCK IN CADAVERS

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10.1136/rapm-2023-ESRA.260

Application for ESRA Abstract Prizes: I apply as an Anesthesiologist (Aged 35 years old or less)

Background and Aims Consistency in needle tip positioning within interfascial planes while performing infiltrative blocks under ultrasound guidance may be difficult. Such planes go beyond the physical limits of common ultrasound machines. Aim of this pilot study was to understand if injection pressure monitoring at the needle tip can help to immediately and consistently identify an interfascial plane needle tip placement.

Methods We performed 4 ultrasound-guided TAP blocks on cadaver using a modified conventional peripheral nerve block